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THE CATHOLIC APOLOGIST

III

THE IMMORTALITY OF THE SOUL

WE HAVE seen in the foregoing chapter that there must be a Deity, First Cause of all things. The Universe in which we dwell is a vast machine gradually tending through unimaginable epochs towards the cessation of all movement, it is slowly but surely running down, it and everything in it is subject to flux, motion and change; it cannot therefore be a sufficient reason for its own existence, but demands a self-existent First Cause Who made it and set it in motion.

Further, we have seen from the consideration of His Works that this First Cause must be an intelligent and personal God.

We must now consider that masterpiece of His Handiwork whereof we have experimental knowledge, namely, the human Soul.

If we prove that the human soul is an immaterial substance, we prove that it is immortal. For decay, dissolution and death, result from the antagonism of conflicting elements constantly tending of themselves to disintegration, but temporarily held together by the vital force. An immaterial substance is of purest simplicity, it has in itself no elements of corruption, once created it is by nature immortal. Nothing can cause it to cease to be, except the Creator withdrawing from it the existence He gave. It cannot die of itself.

The question then resolves itself into this: is the human soul an immaterial, spiritual substance?

I start with the postulate which I have already laid down, that no cause can produce an effect above its powers of causation.

By "material" I mean that it acts and can only act through a material organ and produce material effects. The highest material faculty we possess is the imagination. I can conjure up in the fancy all sorts of images, and these images I can combine and so produce pictures of things that never have been and never will be. I can picture a river and I can picture milk, I can combine the two and fancy a river of milk, though such a thing never existed. These images may be definite or indefinite; I can form a picture of some distinct person whom I know, or I can conjure up a vague, indefinite figure of a man, something quite indistinct and nebulous, an upright figure having a head, a body, two arms and two legs with nothing distinctive about it, something which is everybody and yet nobody. This is what we call the common phantasm. In the far distance I can tell that the thing moving across the fields is a man, though I have no notion who it may be; it is the common phantasm which enables me thus to group and classify various figures. This common phantasm has been responsible for an instinctive action resulting therefrom. All this we share with the brutes, only in a higher degree because our imagination is more perfect than theirs.

But our soul furthermore possesses a faculty by which it is able to soar right above all material conditions whatsoever and form purely immaterial conceptions, abstracting these from the material images presented by the fancy. We can form in our minds notions of Being, Goodness, Truth, Justice, Beauty, etc. Now! our imagination can picture someone doing a good action, or a beautiful sunset or something of this kind, but it is utterly impossible to form pictures of such abstract notions as Goodness, Beauty, etc., though we know perfectly well what we mean by them. They are purely intellectual, immaterial conceptions rising altogether out of the sphere of matter. Or again, if we consider mathematical definitions, a line is length without breadth, a point has no dimensions at all, our intelligence understands these matters at once; but try to picture them without your imagination you cannot do it, matter is simply not receptive of a mathematical line or a mathematical point, if you try to depict them with the fancy, or on paper with the finest etching pen, your line will have some breadth and your point some dimensions. What does this show us? It shows us that our soul has a power of rising altogether out of the realm of the material and producing immaterial effects. As a thing acts so it is. The soul could not produce immaterial effects unless itself were immaterial. It is beyond the causative power of anything material to produce an immaterial effect; there would be no proportion between

the cause and the thing produced. We are therefore compelled to conclude that the soul is immaterial, spiritual substance, and consequently by nature immortal. The very fact that we are able to conceive the notion of Spirit is proof enough that our soul is a spiritual substance; for spirit altogether transcends the power of imagination to portray; if you endeavour to imagine spirit, the best you can do is to formulate a symbol, knowing perfectly well the while that it is only a symbol.

Our body dies either through some accident or illness which so affects the bodily organs that they can no longer perform vital functions; or else because, through sheer old age, the mechanism of the body wears out and the machine comes to a stop. Our soul is not organic, nor is it a machine; it is a simple, spiritual substance, by its very nature indestructible.

We can put the whole argument into the form of two simple syllogisms:

An immaterial effect requires an immaterial cause;

The human soul produces immaterial effects;

Therefore the human soul is an immaterial cause.

We proceed:

An immaterial substance is by nature simple and indestructible;

The human soul is an immaterial substance;

Therefore the human soul is simple and indestructible.

To say that in sleep or under the influence of an anæsthetic our mind is inoperative, proves nothing against our position. It is easily answered. We have seen that in our present state the intelligence abstracts its universal notions from the images presented to it by the fancy. If then, through any cause the imagination is quiescent, the intellect will not be consciously operative, for it is deprived of the matter from which it abstracts notions. In dreams or madness the imagination is out of control, disturbed and irregular; the intelligence then cannot act rightly because its servant, the fancy, is not properly supplying it with matter for abstraction. But nothing whatever will do away with the patent fact that when the intellect is operating under normal conditions, it produces immaterial conceptions, and it could not do this if the soul were not itself an immaterial substance, for there would be no proportion between the cause and the effect produced.

The arguments of those who maintain that the souls of the brute creation differ only in degree and not in kind from our own, if they were cogent would not prove that the human soul is not immortal: they would, on the contrary, go to prove that the brute's soul is immortal also. They are not, however, cogent. We can only judge

of the nature of a thing by its actions; action is the index of nature. Nor is there anything in the actions of the brute creation which rises above the causative powers of the common phantasm, the collocation of images, and instinctive inference. I rule out of the question the instances we occasionally hear of about calculating horses and philosophizing dogs, for here the incalculable enters in; such instances are admittedly not normal. If a dog commenced doing mathematical calculations, most people would run out of the room in terror. I should promptly destroy the animal if it were mine. We have no proof that animal sagacity rises out of the particular into the region of the universal. If the animal soul survives the shock of bodily death it is by virtue of some law whereof we are utterly ignorant. It is not susceptible of reasoned proof.

Other arguments are often put forward in proof of the immortality of the human soul; such as the universal consensus of the great bulk of mankind. Nature being the work of God: whensoever you find the voice of nature constant and universal, you know that it cannot be telling a lie. These arguments are corroborative. But the great proof is the metaphysical argument I have given above. No other is really needed.

Not much attention can be paid to the experimental proofs of the Spiritualists; the most they show is that there are extra-mundane intelligences, but whether disembodied souls or other spirits is not proven.

The above arguments for the two great primary truths of religion are not difficult; they only require a little attention. You have but to hold before your mind two elementary principles which all reasoning presupposes: namely that "for everything that exists there must be a sufficient reason for its existence," and "no effect can exceed the cause which produced it," all the rest follows clearly and convincingly from these two principles.

IV

HISTORICAL TRUTH OF THE NEW TESTAMENT

Having reviewed the proofs for the two fundamental truths of all religion, i. e., the Existence of God and the Immortality of the Human Soul, we must now proceed to the question of revelation. No one will be disposed to doubt that it is possible for the Creator, infinitely wise and powerful, to reveal to His intelligent creatures truths concerning Himself and His dealings with us which the finite intelligence could not have discovered of itself. The question is as to the fact, has he done so?

Leaving other religions, which claim to be revealed, to produce their own credentials and speak for themselves, we will turn our attention to the Christian religion which we profess.

The history of the founding of this religion is contained in that collection of books known as the New Testament, whereof five are narratives, twenty-one letters, and one book of prophecy. We will confine our attention to the narrative portion, looking upon the letters and prophecies as corroborative of the narrative. Be it understood we assume no inspiration whatsoever; it would be premature at this stage. You can only argue with another from premisses which he already grants, or which you can compel him to grant. In arguing with an unbeliever, therefore, it would be useless to start with the assumption of the inspiration of Holy Scripture. Our only demand of such an one is that he grant the general historical accuracy of the New Testament narrative. If he grants it, this is in his case unnecessary; if he does not grant it, but elects to consider the New Testament narrative as no more than a beautiful myth, you then proceed to destroy his hypothesis and to force him to concede its historical truth.

These books were written in the latter half of the first century, our earliest MSS. of them date back to a very remote period. That in this brief interval these jealously guarded documents were practically rewritten is an hypothesis which will only be put forward by a very silly man and only adopted by very silly people. We are justified, therefore, in assuming that as we have them now they are substantially the same as they issued from the pen of the original authors. That these authors are none other than those to whom the writings are accredited, namely, Matthew, Mark, Luke and John, can be proved with overwhelming evidence.

The Gospels and the Acts of the Apostles are a narrative of human events. Now, a narrative of human events is one of two things, either it is history or it is fiction. Whosoever denies that the N. T. narrative is history must maintain that it is fiction, for no other alternative is left to him. Which implies that the writers of the narrative either invented the character of Jesus Christ altogether, or if he existed he was not as they depicted him. That is to say, they knowingly and wilfully either invented or at least faked the character. There is no evading this: for either the events recorded took place, or they did not. If they did it is history, if they did not it is fiction. Allegorical fiction perhaps, it matters nothing as far as this argument is concerned. If the narrative is not a record of accomplished facts, then it is fictitious. The Gospel narrative certainly poses as a record of accomplished facts, as such it has been received, as such it has

wrought its wonders. If, then, it is not what it pretends to be, there is no other alternative but that it is fiction.

Now see what this implies. It implies that four men conspire to write a romance, knowing it to be untrue. I say "conspire" as a concession, for internal evidence would lead us to suppose that the books were independently written, which of course, much increases the difficulties to be overcome. Well! then, let us say they conspire to write this romance; their success is phenomenal; they produce a romance of such enthralling beauty that it has captivated the mind and heart of man as nothing else has ever done. Their lie has influenced the history of the world incomparably more than anything else that ever happened on this earth: it has moulded nations and inspired crusades: it has revolutionized public opinion: it has created the most lofty conceptions in literature, architecture and art: it has promoted the highest civilization the world has yet produced: it changes the lives of millions, raising men and women from the lowest depths of degradation to the most exalted sanctity. It is the mainspring of heroic self-sacrifice. At the present day it sends forth countless numbers of missionaries who relinquish home and country and comfort and all that life holds dear, to face life-long exile, severest privation and even death itself, simply and solely to propagate this lie. We may well ask, could a falsehood have done all this? Is it possible that such results have no firmer basis than a literary fraud? No one calls in question the general historical accuracy of the accounts of the rise of Confucianism, Buddhism or Mohammedanism. Confucius was undoubtedly a real person and a great sage; Gautama a man of exalted genius and blameless life; Mohammed a personality of tremendous power. Yet none of these religious systems is able to uplift human nature as Christianity can, none of them has the same vitality, none of them can point to similar achievements. Can, then, Christianity alone be built on a myth?

We then turn to consider the men who have wrought this prodigy. Were they in the smallest degree capable of producing a romance so marvellous that it surpasses immeasurably in wonder, in beauty and in power anything that the world's greatest writers have ever conceived? We should at least expect them to be men of superhuman genius and attainments. They were nothing of the kind. One was a tax-gatherer; another, we do not quite know what; the third a physician; the fourth a fisherman. The only one who exhibits literary skill is the physician; he is indeed a cultured man and an artist in words, but in no sense the transcendent genius that one must postulate for the invention of the Gospel story. The least educated of them all is the most wonderful: The Galilean fisherman contrib-

utes as his share to the romance a theology of such unimaginable sublimity that not one of the greatest philosophers who have ever lived has even distantly approached it. The theology of the Incarnation as formulated by St. John is in itself proof sufficient of its own Divine origin; it hopelessly outclasses any of the loftiest conceptions of the most exalted genius; no human intelligence could ever have evolved that theology; on the face of it clear and unmistakable rests the stamp of revelation. We must not here postulate inspiration, nevertheless for my own part I cannot see how one can account for the theology of St. John unless he was inspired; the unaided human intelligence could not reach it. Certainly it never has done so, for all the so-called incarnations that I have ever heard of do not transcend materializations such as we read of in the history of Tobias and other places in Scripture where spirits have assumed corporeal form: but that is a very different thing from the true Son of Mary being the Eternal Word. Could this theology by any possibility be the invention of a romancing fisherman of Galilee?

Those men could no more have made that romance than a village blacksmith could have made the Forth Bridge. Why! the united genius of Plato, Shakespear and Aristotle combined could not have done it.

We next inquire what motive they could have had for deceiving all future generations of men with a pack of worthless and pernicious lies. They knew perfectly well that in this world they had nothing to expect from it but persecution, imprisonment, stripes and death. Do men tell lies when they have nothing to gain from it but misery? There is no assignable motive for the writing of the Gospels but intensest conviction of their truth.

After having placed these already insuperable difficulties in the way of the fiction theory, we have still one crucial objection left.

The ablest and fiercest foe of these romancers and their dupes is on the road to Damascus for the express purpose of exterminating them. He is not in the least predisposed for what follows; on the contrary, the whole bent of his vast intellect and gigantic energies is in the diametrically opposite direction. On the way to Damascus this extraordinary man imagines that he has a vision which so physically affects him that he is temporarily blinded: this vision so exactly coincides with the hated romance, that in an instant he is changed, and from being the bitterest persecutor he becomes the most zealous propagator and the most copious exponent of the very fabrication he has set out to obliterate. On the hypothesis that the gospels are fiction, how on earth do you account for the history of St. Paul?

But if they are not and cannot be fiction, what are they? They must be true history, written by men who were themselves eye-witnesses, or in immediate contact with eye-witnesses, of the events which they record. No other alternative is left, either they are history or they are fiction, one or other they must be.

You thus have your argument between the horns of a dilemma from which there is no escape. He started out airily asserting that the New Testament narrative was no more than a beautiful myth. Very well! now he must either negotiate these particularly stiff fences, which you have shown to lie in his way, or he must concede to you that the New Testament narrative is authentic history; or else he must relapse into ignominious silence, if he has not the candour and manhood to yield the assent of his reason to evidence.

It is possible that he will lose his temper and call you pretty names. But one thing is quite certain, he will not be able to answer your arguments. Rarely does a rationalist reason. He suggests, he asserts and he sneers, he will try to entangle you in a side-issue. But bring him up against clear-cut reason and he will never give you a reasoned answer.

There are those who argue against the truth of the Gospel narrative, that they are the only extant written witness to the life of Jesus Christ and that it is hardly likely that a life so remarkable should have passed unnoticed by contemporary writers. It is not in the least unlikely. Consider the situation. First of all, the contemporary writers who have come down to us are very few. Then it must be remembered that in those days Palestine was farther removed from the principal seats of culture than the Soudan is removed from us now. Even if he ever heard of it, which is improbable, what sort of impression would the career of Jesus Christ have made upon the mind of a Roman man of letters? About as much, or rather less, than the doings of the Mad Mullah would make upon a modern historian. In twenty centuries' time, despite our means of communication and our copious press, what record is likely to be left of the exploits of the Mad Mullah? The only more or less contemporary writer in whom one might expect some allusion to Jesus Christ is the Jewish historian Josephus. In his writings we do find the following passage: "Now, there was about this time Jesus, a wise man, if it be lawful to call him a man; for he was a doer of wonderful works, a teacher of such men as receive the truth with pleasure. He drew over to him both many of the Jews and many of the Gentiles. He was the Christ. And when Pilate, at the suggestion of the principal men among us, had condemned him to the Cross, those that loved him at the first did not forsake him; for he appeared to them alive again

the third day ; as the divine prophets had foretold these and ten thousand other wonderful things concerning him. And the tribe of Christians, so named from him, are not extinct to this day." (Ant. xviii., 3.) As this passage is to be found in every known manuscript of Josephus' works there seems to be no very valid reason for doubting its authenticity. But our disputants say it ought to be rejected, because it was not likely that he would have written so striking a testimony. Note the reasoning ; the Gospels must be rejected because it was not likely that other contemporary writers would have passed by unnoticed so remarkable a career as that of Jesus Christ ; when such an illusion is found in the only contemporary writer in whose works it was in the least to be expected, then this must be rejected because it was not likely that he would have made it. With such reasoning it is hard to contend ; perhaps it is not worth while.

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(To be continued)

THE MYSTERIES OF MITHRA

THAT Christianity had no ancestors is a proposition which the present-day historian of religions frowns and shakes his head at. It jars rudely with his theory of what must have been the case. The missing family tree of the Church creates the same sort of lacuna in his calculations as does that of primitive man in the reckonings of the anthropologist. And the method of bridging it is identical. The ancestors are not to be found, but neither can they really be missing, because that would throw us back upon—well, a personal God, divine intervention in the affairs of this world, and a number of other unthinkable things. Of course, there is the Hebrew Bible, but that is admittedly insufficient. The tremendous leap from the Old to the New Law must be figured down to the dimensions of a merely natural transition if the supernatural explanation is to be scouted, and the simplest way to do this is to get the Church at the bottom of a genealogical table. The structure of this table naturally varies with the different craftsmen, but the many oriental cults which took root in the Roman Empire under the early Cæsars, and especially that of the Persian god Mithra, are timber seldom left unused. They all have one advantage for the purpose, that they lend themselves to very free handling, since little is known about any of them. Perhaps no responsible writer would go so far as did Dupuis more than a century ago, and throw out offhand remarks about “the mysteries of Mithra, and Christianity, which is only one of its sects,” “Christianity, a mere sect of the Mithraists.” Rather, supposed analogies are developed and emphasized, the dependence of Christianity being taken for granted, or it is suggested that the two cults are distinct currents of religious thought which had a common origin “in old popular conceptions diffused through the ancient world, which go back undoubtedly to an epoch antedating the literary legends of paganism, and which constituted the mystic *milieu* in which both Christianity and Mithraism took shape.” The author of this passage, M. Salomon Reinach, says elsewhere:¹ “The analogies with Christianity may be resumed as follows: Mithra is the mediator between God and man. He assures the salvation of mankind by a sacrifice; his worship includes baptism, communion, feasts; his followers are called ‘brethren’; in the Mithraic clergy there are men and women

¹ “Orpheus,” p. 202.

who have vowed celibacy ; his moral code is imperative and identical with that of Christianity."

Our evidence regarding Mithraism is almost entirely indirect, since the allusions to the cult in the ancient authors are but scanty and random. There being, therefore, no ancient commentary to interpret the numerous inscriptions and monuments, the reconstruction of the system becomes largely a matter of guesswork. M. Cumont, the leading Mithraic scholar of the generation, to whom much that is contained in this article is due, confesses quite frankly : "Our position is very like that of a man who would have to write the history of the Church in the Middle Ages without other resource than the Hebrew Bible and the sculptured debris of Romanesque and Gothic portals." It is more than probable that with the materials which we possess, no reconstruction can be made which the ordinary western Mithraist would own as his religion.

From the very beginning Mithra appears to have been a solar god. A recent discovery proves that he was worshipped in Asia Minor as early as the fourteenth century before the Christian era, and the title Varuna-Mitra, given to the supreme deity in the Indian Veda, indicates that he was an Indo-iranian god before the division of the race. In the Avesta, the sacred books of the Persians, parts of which are believed to date back to the sixth century B. C., though not a divinity of the highest order, he is the "first of the spiritual yazatas," or inferior genii. He is invoked as "lord of the wide pastures, the truth-speaking, eloquent in assembly, the thousand-eared, the shapely, the myriad-eyed, the exalted, lord of the broad outlook, the strong, the sleepless, the vigilant."² To him was the observance of contracts especially sacred. A well-defined ceremonial regulated his cult. There was "sacrifice of small beasts and great and of birds that fly," libations of the juice of the haoma plant, prayer with preparatory libations and mortifications. The inscriptions of the Achæmenids, the Persian dynasty which ruled from the seventh century to the time of Alexander, also represent Mithra as a lesser god, but one who stood in high honor. After the vast conquests of these sovereigns, the Magi carried his worship into most of the countries subject to Persian domination.

In this old Iranian naturalism, we have only the first nucleus of the religion which later on made such tremendous headway in the West. But to trace step by step its obscure evolution is altogether beyond us. Perhaps Babylon exerted the profoundest influence. It was there that the Great King resided during the winter, and there the Magi were brought into contact with a strong, well-organized

² Translation from the James Hastings' Encyc., art. "Mithraism."

Semitic priesthood. As a consequence their teaching took on a thick coating of Chaldean astrology, and was thoroughly saturated with the idea of Fate.

The fall of Persia, and especially the break-up of Alexander's empire, unsettled the old religious outlines of the near East, and ushered in a period of agitated confusion. In the clash of divers cults there was much lending and borrowing, with a general tendency, wherever Greek thought predominated, towards syncretism. Mithra enjoyed a singular handicap over most rival deities. Not only the Seleucids, but the numerous "mushroom dynasties" also, which sprouted up in the provinces of the former empire, took pride in posing as descendants of the old Persian kings, and in aping their religious as well as secular traditions. Moreover, Mithra, the god of warriors and of military honor, had always been a favorite with the nobles, and since these had established themselves in all parts of the empire, and generally retained their prestige after its fall, it is reasonable to infer that they counted for much in popularizing the worship of the great *yazata*. The frequency among the ruling classes of the name Mithradates, not to mention Mithrabates, Mithragathes, confirms this.

Mazdeism, of which Mithraism was only a sect, never gained much of a foothold in the Greek world. National antipathy for all things Persian played its part in this exclusion; but other more material causes can be pointed out. There were very few Roman soldiers quartered on the banks of the Ægean, the slave population was largely indigenous, and eastern merchants did not control Greek commerce. We shall see further on how these three factors operated in the propagation of Mithraism in the West. Still, Hellenic thought exercised a noteworthy influence upon it, and in a variety of ways: the principal Mazdean divinities were identified with those of Olympus, Mithra with Helios, Apollo, or Hermes; certain features of the Greek mysteries were adopted; to Greek art are due those conceptions which later became conventional in the mithrea the celebrated group, for example, representing Mithra slaying the bull, being the creation of a Pergaman sculptor; lastly, Stoic philosophy, with its broad naturalistic interpretation of all the oriental myths, led the Magi, who needed some such intellectual prop to support their traditions, to modify and adapt their systems considerably.

In his life of Pompey, Plutarch remarks casually that the Cilician pirates, conquered in 67 B. C., introduced Mithra into Italy. If this be true, his handful of devotees remained lost more than a century among the many strange sects of the seaport towns. The

earliest Roman inscription thus far found was set up by a freedman of the Flavians. 69 to 96 A. D. The poet Statius had certainly visited a crypt when he wrote his *Thebaid*, about the year 80. and Plutarch, at the beginning of the second century, supposes the god to be pretty widely known. With Trajan the monuments become numerous. Commodus created quite a stir by having himself initiated, and at the time of the Severi, first half of the third century, Cumont shares Paul Allard's opinion that the number of Mithraists equalled, if it did not surpass, that of the Christians. This seems clearly an exaggeration, though perhaps Toutain and Harnack go too far in reducing it. Under Aurelian the Persian god fell little short of becoming, under the title of *Sol Invictus*, the official divinity of the empire. Diocletian, Galerius, and Lincinius, in 307, consecrated a sanctuary at Carnutum on the Danube, to Mithra *fautori imperii sui*. But with the withdrawal of government favor after the Edict of Milan, a swift decline set in, to be interrupted only by the sporadic recrudescence under Julian. Finally, in 394, Theodosius proscribed the cult by imperial edict, and it disappeared almost immediately.

Mithra's invasion of the Roman Empire is naturally coincident with the definite conquest and opening up of eastern Asia Minor. The great Iranian dispersion, which began with the return of Vespasian's Asiatic legions to the West, did not get well under way till the time of Trajan. It was this diaspora, in some respects not unlike that of the Jews, which carried the cult of the Mazdean *yazata* to the farthest extremities of the known world. Interesting as would be a study of the spread of Mithraism, we must content ourselves here with simply indicating its chief vehicles. Of first importance were the thousands of Oriental recruits who, when transferred to the various frontier lines of the Empire, not only remained faithful to the god of their fathers, but became his zealous apostles among their fellow soldiers. Nowhere have more crypts been discovered than in the old outposts along the Danube and the Rhine, while every section of the Wall of Hadrian in north Britain appears to have had its separate sanctuary. Secondly, there were the countless cargoes of slaves which came pouring into Italy from the East. These slaves rose to important offices, not only in private households, but also as municipal or imperial agents, and were thus able to exert no small influence as propagandists. The inscriptions prove that they constituted a large element in the Mithraic congregations. Lastly, the Oriental merchants, *negotiatores Syri* as the Romans vaguely designated them, helped spread the cult in the cities and along the great highways of traffic.

Among the circumstances which favored the initial progress of the new religion, there are two in particular which might easily be overlooked: that hostility with which all exotic worships were regarded at Rome even during the first decades of the Empire, had passed before Mithraism opened its campaign; and owing to the fact that its chief instrument of diffusion was the army, and that it never penetrated into the great Hellenic world, it encountered Christianity only after its main conquests were assured.

Moreover Rome of the first century was ripe for an infusion of Oriental mysticism. The traditional cult had always been too exterior and official, and was long since outworn. The religions of the East with their symbolical liturgies, their expiations and purifications, their cloudy sentimentalism, their stressing of a future life, reached down into the depths of the human soul left unstirred by the conventional paganism. These foreign priests promised to lay open to the neophyte bit by bit, in the progressive initiations, a mysterious lore handed down from the beginning by their ancestors in the far-away Orient, and *omne ignotum pro magnifico*.

But Mithraism had attractions peculiar to itself. A strong *esprit de corps* seems to have reigned in the little communities, and something approaching a spirit of democracy,—noble and plebian, master and slave meeting there on a footing of equality,—which even the great might welcome as a momentary relaxation from the hard and fast caste system of the world around. Nor should we overlook that robust virility of the cult of Mithra, which recommended it to the soldier, perhaps, too, its high morality, though this is problematical, and a semblance of dogmatic coherence, which made it acceptable to the educated classes.

Cumont says that Mithraism had “a true theology, a dogmatic system borrowing its fundamental principles from science.” We would come nearer the truth by substituting “theosophy” for “theology,” and for “science” “pseudo-science,” understanding thereby the spurious physics and astrology of the age. Call it what you will, the system is much too obscure and complicated to be enlarged on here. Dualism perhaps was its most essential feature. Infinite Time, the first principle, engendered not only Heaven and Earth and through them all the other gods of light, but Ahriman also, prince of the realms of darkness. This latter with his satellites carries an unceasing warfare against the human race, which is aided in the struggle by Mithra and other heavenly champions. The nether gods must be appeased by expiations, and may even be controlled by means of incantations; whence magic, a word which traces its origin back to the Magi.

A point of immense practical importance, which should not be lost sight of in comparing the early successes of Mithraism with those of Christianity, was the absence of exclusivism or of doctrinal intransigence. Mithra put forward no claim to undivided allegiance, demanded no intellectual surrender. His devotees might, without fear of divine jealousy, frequent the temples of half a dozen other gods. He himself flung wide the door of his pantheon to all the more popular Græco-Roman divinities, simply identifying them with one or the other of his own. That emperor worship, so insisted upon by the authorities and so abominated of the Christians, far from occasioning any embarrassment to a Mithraist, found a very honorable place in his cult. The Magi were even able, by ingeniously manipulating their astrological and fatalist theories, to establish a quasi-scientific foundation for the emperor's claim to rule by divine right and to apotheosis. Herein lies one explanation of the high favor in which they always stood with the pagan sovereigns.

The legend of Mithra's life on earth must be conjectured from a study of the reliefs found in the mithrea. The birth scene represents him as an infant rising naked from a cone-shaped rock, a torch and a knife in his hands, and on his head a Phrygian cap. Shepherds seem to watch from near a river. That a connection between the two scenes is intended may be questioned, since the shepherds are also represented independently. Father Martindale³ has completely discredited the assertion that Mithra was held to be virgin-born, and that his death and resurrection were celebrated by an annual feast. The commemoration of Mithra's birth, *natalis Solis Invicti*, fell on December 25, on which day the sun begins its upward course. It is possible, though not proved, that the Church was influenced by a motive of combating this pagan festival, when, in the fourth century, she selected the same date for the feast of Christmas. Mithra's crowning exploit was the sacrifice of the bull. The group Mithra *tauroctonus*, which stood in all the crypts, shows the god resting his knee on the fallen beast's back, drawing back its muzzle with one hand, and with the other plunging a knife into its side. From the body of this bull, which a serpent and scorpion, creatures of Ahriman, strive in vain to poison, sprang all useful plants and animals. Other monuments indicate that Mithra delivered the human race from various calamities, sent presumably by the great enemy, from a drought by shooting an arrow against a rock, which thereupon gushed forth a stream of water, and from a deluge, by gathering all living creatures into an

³ The month, Dec., 1908.

ark. There was a banquet, too, at which the Sun and other guests were present. Finally he quit the earth in the sun's chariot to return to the abode of the immortals. But Mithra never ceases to stand guard over his faithful followers, and to combat with and for them against the powers of darkness. It would seem that he was expected to reappear after a given cycle of ages, and consummate the sacrifice of another mysterious bull; the dead would arise, the wicked be destroyed, after which a reign of perfect bliss here below. "Antique traditions of a still gross and primitive civilization subsisted in the mysteries along with a subtle theology and a high morality."

The first sanctuaries of Mithra in Persia were natural grottos, as may be surmised from the names *spelæum*, *antrum*, *crypta*, given to the subterranean chapels in which he was later worshiped. These chapels were fairly uniform in structure and appointments. From the foot of the stairs leading down from the vestibule, a wide central aisle ran the length of them, on either side of which rose an elevated platform in masonry, without benches, for the assistants. In the apse stood various sacred images, and over the altar the inevitable relief of Mithra slaying the bull. The walls were usually decorated with mysterious astronomical symbols. Of the rites and ceremonies we know next to nothing, because the liturgical books, if such existed, have disappeared. The pretended *Mithrasliturgie*, published by Dieterich, has been proved to be entirely undeserving of the name. Sunday, *dies solis*, was observed in a special manner, as also the sixteenth day of each month.

A few texts of the Christian apologists, interpreted in the light of the monuments, are our main source of information regarding the initiation. Tertullian calls it *sacramentum*, doubtless because of the oath of secrecy imposed. Certainly the analogy between its seven degrees and the seven sacraments of the Church is of the remotest. St. Jerome enumerates these grades as follows: Crow, Crypius (Hidden, Veiled), Soldier, Lion, Persian, Runner of the Sun, Father. They correspond to the seven planetary spheres which the soul had to traverse before arriving at the dwelling of the blessed. From Tertullian we have it that the Soldier was marked on the forehead, and that he rejected a crown presented to him on a sword, saying "Mithra is my crown." Porphyry tells us that the Lion's tongue and hands were touched with honey. It is known that the early Church had a ceremony in which the neophyte tasted of milk and honey, but the symbolism of these substances was so familiar from the Old Testament that it would be very rash to suppose she went elsewhere to find it. Probably too the Lion

was admitted to the sacred banquet of bread and water. Apropos of this banquet, two remarks may be made in passing: there is no indication whatever that in the Occident wine was sometimes mixed with the water to replace the juice of haoma; and the fact that the loaves were notched in the shape of a cross was no piece of occult symbolism, but a common precaution to make easier their division into two parts. The Father's functions,—he is also called *pater sacrorum*,—may be dimly divined from his title. The inscriptions speak, too, of *pater patrum* or *pater patratus*, who possibly exercised some sort of general jurisdiction over all the organizations of the locality.

In the course of the initiation, the candidate was immersed in pure water, a rite, says Tertullian, intended to procure the remission of sin. A similar ceremony existed in the religion of Isis. There were dramatic and deeply impressive scenes, and trials of various kinds, even including stripes and torture. At times the members assumed disguises appropriate to their respective titles: "Some flap their wings like birds," we learn from Pseudo-Augustine, "imitating the voice of the crow; others roar like lions; there you see how those who style themselves wise men are shamefully deluded."

The evidence at hand touching the moral side of Mithraism is simple, and should not be hard to appraise. The early Persians are known to have been a comparatively clean and upright race of men. Herodotus admired in particular their detestation of falsehood and their respect for contracts, and the Avesta preaches a very estimable morality. Add to this that the Christian apologists, in their allusions to Mithraism, never fling the charge of vicious practices. It follows therefore, and follows only, that presumption favors the morality cult. Furthermore, Lampridius would appear to be horrified at the fact that the Emperor Commodus "defiled the sacred rites of Mithra by actual homicide." Consequently it is fair to suppose that the initiations went off as a rule without the taking of human life. But from these dubious, negative indications, M. Reinach leaps incontinently to the conclusion that "its moral is imperative and identical with that of Christianity." Even the more cautious Cumont, after having issued an express warning that on the question of moral precepts "our uncertainty is extreme,"⁴ because we have no right to identify the precepts presumably laid down in the mysteries with those formulated in the Avesta, writes elsewhere⁵ "This imperative, energy-producing moral code is the character which distinguishes Mithraism from all the other Oriental

⁴ "Mystères de Mithra," p. 117.

⁵ "Religions Orientales," p. 240.

cults." A single reference has been unearthed to commandments of Mithra, in a speech of Julian the Apostate. Martindale hits much nearer the truth when he says: "This absence of clear code, and still more of any system of dogma, is what, more than anything else perhaps, marks off the Mithraic, and indeed every pagan religion, from the uncompromising Christian scheme."

Nor may we hush up Mithra's unholy alliance with the *Magna Dea*, whereby provision was made for the women, who were not in all probability admitted to his own mysteries. The shocking nature of her orgies calls for no exposition. "Before giving a Mithraist communion without confession," advises Father Lagrange, "ask him what his relations are with the Great Goddess. If he does not frequent her mysteries, he at least sends his wife and daughter to them."

In a context⁶ where he is accusing Satan of having introduced Christian rites into various pagan cults, Tertullian has the following: "and if I remember aright, Mithra there signs his soldiers on the forehead; he celebrates, too, an oblation of bread, and brings in something like a resurrection, and binds a crown beneath a sword. What about the fact that he has established a supreme pontiff who should marry but once? He has virgins, he has celibates." From these last expressions the inference had been drawn that Mithraism had its supreme high priest, its hierarchy, its monks and nuns. It had been decided that this pontiff certainly resided at Rome—like the Pope, of course. But a few years ago A. deAles⁷ took up the matter, and demonstrated from parallel passages in Tertullian, to the satisfaction of the best Mithraic scholars, that the subject of the last two sentences cited is not Mithra, but *diabolus*, and that the reference is to the *flamen dialis* and the Vestals of official paganism. The history of the passage points a lesson.

A phrase of Plutarch has likewise been much exploited in the effort, doubtless often unconscious, to emphasize a parallel between Mithraism and Christianity. Plutarch affirms that according to Zoroaster there is a god of good, Oromazdes, like unto the light, and a god of evil, Ahriman, similar to darkness and ignorance; "between the two is Mithra. Wherefore the Persians call Mithra the *mesites*,—intermediary."⁸ Anyone at all familiar with the methods and tendencies now in vogue among historians of religions would suspect *a priori* something of the potentialities of this suggestive word in connection with an Oriental god. Its technical Christian sense is at once clapped onto it, just as though one were reading

⁶ "De Præscriptione," p. 40.

⁷ "Dictionnaire Apologétique," Mithra.

⁸ "De Iside et Osiride," p. 46.

an epistle of St. Paul, and it is made to drag into Mithraism the whole New Testament notion of a divine mediator. Even H. Stuart Jones, in general an extremely sober critic, lapses into such scriptural phraseology as "the inspiring conception of Mithra, the Mediator, at once the commander under whom the individual shares in the fight against the prince of darkness, and the Redeemer who grants to his faithful servants final deliverance from this body of death." It should be observed, first, that the epithet is nowhere else applied to Mithra; secondly, that Plutarch is here speaking of the doctrines of Zoroaster; and thirdly, that Mithra held the *middle* place in purely physical sense, both in his Iranian character of light divinity, between the upper ether and the material earth, and in his Chaldean role of sun god, the center of the planetary system; and that, at all events, what the text of Plutarch states is that Mithra was called *mesites* because he came between the supreme god of light and the god of darkness.

Space does not permit a more detailed discussion of the numerous analogies alleged between Christianity and the "faint and faded legend" of the Mazdean god. A word or two on the ensemble must suffice. It is true that some of the early Fathers, particularly St. Justin and Tertullian, taxed their ingenuity to find analogies, in order to bolster up their theory of exploitation by the devil of the Old Testament prophecies. According to this theory Satan found means, from his understanding of the Messianic prophecies, to anticipate and imitate in pagan cults many of the rites of the true Church. Whatever may be thought of the instances they cite or of the explanation proposed, the significant fact stands that these apologists, while trumpeting loudly the existence of parallels, nowhere pause to defend themselves from the charge of borrowing. The reason is obvious—that no such charge was made, that the mere possibility of it did not enter their minds. Even Julian, fervent votary of Mithra that he was and foe of Christianity, does not broach it. Since then the Mithraists themselves, in the heat of their struggle for life against the Church, when the accusation of plagiarism would have been so effective a weapon for confusing their enemies, never dreamed of making it, is it not fair to protest that the eleventh-hour indictment brought forward in these latter times, comes a little too late in the day?

If, however, plagiarism must at all costs be admitted, Mithra is rather the party who should be cited before the bar. Cumont thinks it not improbable that an effort was made to "turn the legend of the Iranian hero into a pendant of the life of Jesus, and that the disciples of the Magi sought to oppose a Mithraic adoration of

shepherds, supper, and ascension to those of the gospels." Explaining the known by the unknown is what Chesterton would call a "soft job," but happens to be the reverse of the orthodox process in history as well as in philosophy and mathematics; and of the two religions, there can be no hesitation in deciding which presents the better birth certificates. Only a few straggling vestiges of first-century Mithraism have come to light, whereas before the year 100 the New Testament existed in its entirety, and there were Christian communities in most of the great centers of the Græco-Roman world. An earlier influence of Mazdeism on the Galilean fishermen or on the Pharisee Saul is too fanciful to deserve serious attention. No traces of it have been found in Palestine, and the gospels and epistles reflect with perfect limpidity that popular and rabbinical Jewry from the midst of which they sprang.

In dealing with possible analogies, it is essential to keep apart three altogether different things—doctrines, rites, and art. As to the first, no fragment of a proof has been produced that the Church owes anything whatever to Mithraism. Even with regard to liturgy, though such influence is not impossible, the historic evidence does not favor it. The common error is to conclude straightway from similarity to identity or actual dependence, whereas such identity or dependence should be established in each individual case. "For none of these rites," says Anrich, "can borrowing be proved." As Origen long ago observed, it is not in the least surprising that human nature, acting under the influence of the religious sentiment, should everywhere express itself in more or less the same way. As to art, there can be little doubt that Christian painters and sculptors drew their inspiration at times from the reliefs of the mithrea.

We conclude with a much quoted comment of M. Cumont,⁹ both because it is full of sound judgment, and because one feels regretfully that the illustrious scholar has himself lost sight at times of the excellent instruction it contains: "We may speak of 'Asiatic vespers' or of a 'supper of Mithra and his companions,' but only in the sense in which we say 'vassal princes of the empire' or 'socialism of Diocletian.' It is an artifice of style to emphasize a similarity and to establish with vividness and approximation a parallel. A word is not a demonstration, and one should not be in a hurry to conclude from an analogy to an influence."

LEO W. KEELER, S.J.

⁹ "Religions Orientales, p. xi.

MORENO, THE MARTYRED PRESIDENT OF ECUADOR

I.

"Statesman, yet friend to Truth! of soul sincere,
In action faithful, and in honor clear!
Who broke no promise, served no private end,
Who gained no title, who lost no friend:
Ennobled by himself, by GOD approved,
Praised, wept, and honored, by the LAND he loved."

Pope (altered).

GABRIEL GARCIA MORENO, the martyred President of the Republic of Ecuador, was indeed a statesman "ennobled by himself and approved by God!" He was, without exaggeration, the model ruler of the nineteenth century. Unlike the so-called rulers of his day, he recognized the fact that no man can be truly great without being truly good; that there is a Power before which the king and the subject are equal, and to which both owe the same obedience; that God is the great Ruler of the universe, and that he who would rule wisely must rule according to His laws. Thus did it come to pass that Garcia Moreno, in the brief space of six years, succeeded in lifting his country out of the darkness of semi-barbarism into the full light of Christian civilization—in giving it a new being, and in establishing among its mountain ranges a peaceful retreat for those two daughters of heaven, Religion and Virtue. He succeeded in proving to the infidel world that a truly Catholic country can be prosperous, happy, and progressive. Moreover, that this prosperity, happiness, and progress can only be found under those governments which are religious in fact, and not in name only, and which are devotedly attached to the Catholic Church and to her visible Head. The modern skeptic will scoff at the idea, but scoffs are not arguments, and we are prepared to prove our assertions with facts.

Don Gabriel Garcia Moreno, a native of Guayaquil, was descended from no line of kings; the only royalty he possessed was from God. His father, Don Gabriel Garcia, was a native of Spain, and his mother, Doña Roserio Moreno, was an aunt of His Eminence Cardinal Moreno (born at Guatemala, Central America, 1817). His early education was obtained at the College of Quito, where he so distin-

guished himself in his studies that he soon attracted the admiration of his professors and companions. They already saw the future father of his country in the young Garcia. In after life, when he emerged from the retirement he loved so well, and in answer to the call of country, appeared in the national councils, his honest aims and his honest actions commanded the admiration of the people. That love of lucre, which is the bane of the public man of to-day, found no place in the heart of Garcia Moreno; God and his country were its only occupants. He could not be called a fanatic, as his enemies regarded him, because his temperament was devoid of that impulse and impetuosity which grow out of an unevenly balanced mind. Indeed, were it not for his progressiveness, which manifests itself throughout the length and breadth of Ecuador, he was more like a patriarch of old than like a ruler in this so-called glorious nineteenth century. He was a man who reflected honor on manhood. He did in a circumscribed sphere all that Plutarch claims for his greatest heroes; but, unlike them, he did it for the honor and glory of God. He possessed a true conception of greatness, and in pursuit of his grand and sacred duty, raising himself continually, he dared attempt what in our infidel age seems impossible, and as we have already stated, *he succeeded*. In a wider field he would have been looked upon as a Saint Louis or a Charlemagne.

He neglected no means which could promote the rapid progress of civilization among his people. In the eyes of his enemies, he had but one fault—he was *too Catholic*; and infidelity, trembling for its own future, *murdered him*.

It can hardly be believed that the little Republic of Ecuador, hidden among the mountains of South America, brought forth this prodigy, a man bold enough, and intelligent enough, to transform his people, who were like their brethren in the neighboring republics when he assumed control of them, into true and faithful servants of God. It was under the rule of Garcia Moreno that Ecuador saw its golden age. Under his firm but beneficent rule it passed from darkness to light, from ignorance to learning, from religious indifference to practical Christianity. Its almost inaccessible mountain passes became not only safe from the attacks of robbers, but were transformed into excellent stage-roads, or resounded with the whistle of the locomotive. At his command an astronomical observatory revealed the mysteries of the heavenly bodies; hospitals sprang up everywhere, and Catholic charity opened her doors to the poor and afflicted. In every hamlet, from the banks of the Amazon's tributaries to the shores of the Pacific primary schools for the gratuitous instruction of all classes have been established, and the poor Indian, oppressed

for centuries, can now (or rather could, under Garcia Moreno) enjoy the benefits of education and equal rights with his former conquerors. Moreno was a strong advocate of the public schools, but he desired that in them little children be taught to reverence God and His laws, just as he desired that in the universities (founded by himself) God and His Church should be treated with the profoundest respect.

Knowing the weakness of human nature, he erected among other public buildings, a penitentiary for the detention of criminals, and it is to the honor of his country that out of a population of over a million of souls, the number incarcerated at the time of Moreno's death did not reach fifty. Let it be borne in mind, too, that crime was eagerly ferreted out and speedily punished, as we shall show hereafter.

To form a fair idea of what Garcia Moreno did during the six years of his administration, let us make a brief extract from his last annual message to the Constitutional Assembly of Ecuador, that masterly document, which reads more like the pastoral of a patriarch than a message, and which was found upon his person after the cruel steel of the cowardly assassin had done its bloody work. We translate the following extract:

"To sum up, the Republic, at the end of these six years, has 300 kilometres of highways, with a large number of fine, solid, stone bridges; 44 1-2 kilometres of railroad in running order, and 400 kilometres of good and new foot-roads. An imposing and spacious penitentiary; an astronomical observatory, which will be the greatest ornament to our capital; new colleges, schools, hospitals, new or improved barracks, orphanages, a foundling asylum and reformatory, and a conservatory of music and fine arts, have been built or acquired during our time. All this appears incredible to those who know the backwardness and poverty of our country, and who are ignorant of how much fecundity there is in the confidence in God's goodness. If what has been accomplished appears great in comparison with other times, it is really very little if we take into consideration what the country still requires. But as we cannot expect to do all at once, I think we should confine ourselves for the next two years to the completion of unfinished roads, to the completion of buildings for schools in every parish, of colleges and hospitals in every province, of a normal school for teachers, and for the medical faculty in Quito; and to erecting, at the Santa Elena Salt Works, the wharf, railroad, and the depot, which are indispensable and of great advantage to the treasury, provided you deem these suggestions worthy of your approbation.

"But still more gratifying is the advancement made in public in-

struction in all its branches, which is religious and Catholic before all else. In the primaries the number of schools has been increased by 93 new ones, during the last two years, and the number of pupils has gone up to 32,000, or 237 per cent. more than it was six years ago.

Number of pupils in 1867..... 13,495

Number of pupils in 1871..... 14,731

Number of pupils in 1873..... 22,458

Number of pupils in 1875..... 32,000

"You will observe that the increase in four years was very small, but from the time that primary instruction *was removed from the negligent direction of municipalities and academic councils*, the advancement has been, and continues to be, satisfactory.

"But we must not be satisfied with this. . . . Let us continue to redouble our efforts, fully convinced that without the Christian education of the rising generation, society will perish by degenerating into barbarism.

"In secondary educational institutions, the progress is not what it ought to be, chiefly because of the scarcity of competent professors to carry it into the principal centres of our population, as the Government would desire it. I think that in order to overcome this evil, and for other reasons of manifest propriety, you should establish freedom of education, admitting, *without distinction*, to the degree of Bachelor of Arts, all who, after a course in any college during the time specified by law, pay the costs of matriculation and of the examination they must undergo, and are then approved after trial, according to the programme laid down by the General Council of Public Instruction.

"Higher education in facultied universities, and especially in the Polytechnic School, continues yearly to give satisfactory results. The faculty of medicine, which has notably improved, will be permanently organized in a few days, and if you order the erection of an adequate building, without which its thorough arrangement is impossible, it will reach that degree of perfection which is expected of it by the present advanced state of science."

In this memorable and model message, the Christian President does not forget the indebtedness of the country to the saving influence of the Church. He acknowledges the good results of the labor of those religious communities that have contributed so vastly to the education of youth. Among these may be mentioned the Christian Brothers. When the Commune of Paris, during the revolution which followed the Franco-Prussian war, were about to exile these devoted Brothers, Garcia Moreno fitted out a ship at *his own expense*

and sent it to France with an entreaty to the Superior-General of the Congregation to send him *twelve hundred* Brothers. These he pledged himself to support and maintain. But the Commune which banished the Brothers was not France; she never forgets the services of her faithful children, and the devotion of the Christian Brothers upon the field of battle, as well as their labor in the halls of education were too gratefully remembered by France to permit them to quit her soil forever. Of the twelve hundred Brothers expected by Moreno, France could spare but twelve, and these were received with open arms. An industrial school was in time established by them, on the plan of that flourishing institution, the Catholic Protectory at West Chester, United States, and Brother Telio, the well-known Superior of the latter institution, visited Ecuador to start the new enterprise. The Redemptorists, the Jesuits, and the other orders found a most hearty welcome from Garcia Moreno, who gave them a broad field to work in.

The closing words of the message seem to indicate a presentiment of the sad end which awaited him. It sounds more like a farewell to the Assembly than like one of the annual addresses his official position demanded of him.

"Never forget, O legislators," said he, "that all our little advancements would have proved ephemeral and fruitless if we had not based the social order of our Republic upon that ever-attacked, but ever-victorious rock, the Catholic Church. Her divine teachings, which neither individuals nor nations can deny without destroying themselves, is the model of our institutions and the law of our laws. As obedient and faithful children of that venerable old man, the august and infallible Pontiff, who has been forsaken by those in power at that very moment that base and cowardly infidelity attacked him, we have continued monthly to send him the small pecuniary assistance which you voted him in 1873. And since our weakness compels us to be the passive witnesses of his slow martyrdom, let him, at least, behold in this humble offering a testimony of our tenderness and affection, and a token of our obedience and fidelity."

We have said that under Garcia Moreno crime was ferreted out and punished with unerring certainty and untiring persistency. But Garcia Moreno was no tyrant, nor did he delight in punishment. He had been known to warn malefactors against his own judgment. He was implacable against conspirators and bandits, and he strove to rid his country of their presence. His own life he held as nothing; he maintained that it belonged to his country, and not to him. He never shrank from the performance of a duty, no matter how trying, nor how full of danger. Alone and single-handed, he quelled the

sedition fomented at Guayaquil, by Urbina. On another occasion, hearing that a certain chieftain had revolutionized a certain town, Garcia Moreno, without saying a word to any one, mounted his horse, and unattended, rode to the town, entered the house of the disconcerted traitor, and surprised him with the terrible words: "Here I am; be off to prison!" Having restored order among the astonished people, he remounted his horse and returned to his capital alone.

So valiant a servant of God could not be without enemies. The powers of darkness dreaded lest a new Paradise spring up among the mountains of Ecuador. They dreaded to see so strong an argument against their ideas of progress. Perhaps the world would open its eyes to the fact that rationalism and materialism were not necessary to its existence, and that a Christian government could be just as progressive as a liberal one, and more so, because it alone contains the element of true progress. They feared all this, and they plotted the destruction of this ruler who was an honor to manhood.

Garcia Moreno was not ignorant of all this, for many passages in his private letters bear evidence of it. The *Orient* had promulgated the decree of his death, and its execution was not to be delayed. When implored to take precautions against his enemies he would reply: "How can a man defend himself against people who reproach him with being a Christian? If I were to satisfy them I should deserve death. From the moment they cease to fear death, they become the masters of my life; as for me, I do not desire to be God's master, I will not shrink from the path He hath marked out for me."

His last letter to the Holy Father, too, was so beautiful, so touching, so thoroughly imbued with a spirit of Christian heroism, that we reproduce it here. He here foretold the fate that was so soon to befall him: "In these days, when the lodges of our neighboring countries, instigated by Germany, are belching forth all sorts of atrocities and horrible slanders against me, whilst they are secretly planning for my assassination, I am more than ever in need of Divine protection, that I may be able to live and die in defense of our holy religion and of this beloved Republic, over which God has called me to preside. Is it not a great happiness for me, Most Holy Father, to be despised and calumniated for loving our Divine Redeemer? And what a great happiness it would be for me if your blessing would obtain for me from Heaven the grace of shedding my blood for Him, who, being God, was willing to shed His own blood for us upon the cross?"

These brave words, embodying as they do, Christian faith and submission to the Vicar of Christ, are enough to immortalize the

name of Garcia Moreno. They point him out as one entitled to universal admiration, as an example for every Catholic, and as a reproach to those *liberal* Catholics, who, in their eagerness for worldly respect, would, Judas-like, sell their religion for thirty pieces of silver.

Garcia Moreno fell a martyr to his faith and to his duty. His cowardly assassination is thus described by Louis Veuillot, the valiant editor of that excellent and fearless Catholic daily, the *Paris Univers*, which I take pleasure in translating:

"He kept on his straight but rugged path, which led to death in time, but to life in eternity; he repeated his favorite maxim: '*Dios no se muere*. God does not die.'

"The most honorable among his political enemies were converted to his system of government, to his person and to his God. He had performed before his country the sublime and resplendent acts of faith. He was recently seen, as the President of the Republic, bearing a processional cross through the streets of Quito. He filled every position and gave every example that could be expected from the most ardent patriotism, from the most energetic soul, and from the most generous heart.

"He was Professor and Rector of the University; Dictator, Commander-in-chief, President. He was the first, and until now the only one, to unite the functions of President of the Republic with those of Director (not honorary, but active and gratuitous) of the Quito Hospital, remodeled and furnished at his own expense. He also added to the President of the Republic that of Member of the Congregation of the Poor, and he performed its duties. He everywhere showed himself strict on himself, sober, chaste, and did not *augment*, but *diminished*, his meagre personal resources. He was economical with the public money, lavish with its benefits, modest, great in everything that commands esteem, love and general sympathy. He had just been unanimously elected for the third time, when the blade of the assassin laid him low. He had been stricken down by a worthless creature whom he had befriended and advanced, but whom he was afterwards obliged to dismiss for incompetency; just the man that the sectaries (Free Masons) often find for acts like these! This man struck him from behind with brutal ferocity, throwing himself like a madman, or like a wild beast, upon his noble victim, and then fled, but was crushed by the populace, and dragged to the public place of execution. He was from New Granada; on his person were found bills from the Bank of Peru, the hotbed of Free Masons.

"It was on the sixth of August, the Feast of the Transfiguration

of Our Lord, that Garcia Moreno was coming out of a neighboring church, where he had gone to hear Mass, and was returning to his work in the capitol. He was killed on the threshold, and carried back to the chapel of Nuestra Senora de los Siete Dolores, the object of his special devotion. He expired in a few moments. His last words were: '*Dios no se muere.* God does not die!'

"We venture to say that God owed him this death. He was to be stricken down in his full strength, in his virtue, at his prayer at the feet of Our Lady of the Seven Dolors, a martyr to the people and to his faith, for which he had lived. Pius IX publicly honored this son so worthy of himself. His people, plunged in the deepest mourning, wept for him as Israel of old wept over its heroes and its just men. Is there anything wanting to complete his glory? He gave the world a singular example during the age in which he lived. He was the honor of his country. His death is another service, and perhaps the greatest. He showed the whole human race the kind of rulers that God could give them, and into the hands of what miserable creatures it resigns itself by its folly."

Thus far we have endeavored, in a general way, to point out some of the chief events in the life of this model Christian statesman. Let us now specialize a little: Garcia Moreno was the youngest of five sons, all of whom were, like their parents, Christians before anything else. The eldest of these sons received Holy Orders; the second, though a layman, made a profound study of Catholic liturgy; the third, who became a wealthy land owner, helped his brothers out of his vast resources; while the fourth, largely engaged in public works, refused to avail himself of all outside emoluments engaged by his predecessors. The legitimate fruits of his labors was all he would accept.

Garcia Moreno had three sisters whose lives were as pure and irreproachable as those of their brothers.

The frequent revolutions that devastated the South American republic made sad inroads upon the fortunes of the parents of young Garcia and reduced them to absolute poverty, which they managed for a time, at least, to conceal from the public. Their greatest anxiety was concerning the future of their youngest boy, as his elders were in a position to take care of themselves. The good mother undertook the task of shaping the course of his young life and trusted in God for the future. She taught him application to study, regularity in all his habits; and to bear the sacrifices demanded of him with Christian resignation, and she found a grateful appreciation of her work in the application of her son. His remarkable intelligence far surpassed his physical strength and he grew into

a delicate youth. His admiration for his mother was really wonderful. Later in life, when speaking, he was wont to say: "En Guayaquil hay solo dos calezas buenas—la de mi madre y la del platano. In Guayaquil there are but two good heads: my mother's and that of the plantain." It would be difficult to make a clear translation of this statement, but Garcia's reference to the plantain is probably based on the description given of the plant by Theophrastus, a Greek philosopher and naturalist of the fourth century. The specific name of the plantain, or banana, is "*Musa Sapientium*," the Muse of the Wise, and naturalists tell us that the plantain was a fruit which served as food for the wise men of India. Young Garcia's mother had taught him to recognize the true value of wisdom.

When Garcia was prepared to begin his classical studies, his good mother was sorely tried because of her slender means to provide him with a suitable instructor, but that Providence in Whom she trusted relieved her of all anxiety. Good Father Betancourt kindly offered to undertake the task. It was also through his influence that his apt pupil was, in due time, enabled to enter upon his college course. Needless to say that his collegiate career was brilliant and his religious impulses increased with his age. At one time he imagined he felt a call to the sacerdotal state, and he went so far as to make this known to Monseñor Garacaia, who approved of the idea so far as to give him Minor Orders. As the youth advanced in his studies he developed a wonderful aptitude for natural philosophy, mathematics and chemistry. He "burned the midnight oil," and although his religious tendencies were as intense as ever, his professors, friends and Spiritual Director decided that he was destined for a more militant career than that of a priest. He was to become the defender of the priest, and in the words of Emperor Constantin, he was to be "an outside Bishop, a defender of the Church." His crozier was to be the sword of justice; and, yielding to the advice of his superiors, he took up the study of law.

But the study of the laws of the Republic of Ecuador in that day presented many phases which were far from being in accord with the principles of the young student. The attitude of the civil law in its relations with the laws of the Church was repugnant to him. He soon realized that the times called for not only a jurist, but for a Bayard without fear and with courage enough to face all that was unjust in the laws and to fight for the triumph of right, and he determined that if he must become a jurist he would be such an one as Horace describes:

"Justum ac tenacem propositi virum . . .
Et si fractus illabatur orbis
Impavidum ferient ruinæ."

In conjunction with his civil and scientific studies, young Garcia completed his law course in four years, and at the age of twenty-three received his Doctor's degree and began the practice of his profession under the direction of the distinguished jurist, Don Joaquin Hernandez, who gave him the highest recommendation. Notwithstanding all this and the fame he soon acquired at the bar, his charity to the poor soon made him known as "the poor man's advocate." He never accepted a bad case nor one tainted with the slightest suspicion.

In due time young Garcia married the Señora Rosa Ascusabi, an accomplished lady, whose family had, in times gone by, taken part in the war for Ecuadorean independence. The union proved a most happy one, disturbed only by the jarring incidents of public life which prevailed throughout the South American republics in those days.

Garcia Moreno did not fail to feel a presentiment of the role he was destined to play in the future history of his country and the effect his love for the land of his birth was about to impose upon him. To a distinguished scientist who suggested to him that he write a history of Ecuador, he smilingly replied: "Had we not better make it first?" His own history was destined to be blended with that of his country.

Let us here cast a brief glance at the condition of affairs in the young republic at this time. Ecuador was the offspring of the dismemberment of Colombia, "that brilliant but ephemeral creation of the great liberator, Simon Bolivar," and "the offspring inherited the original sin of its mother."

Father Berthe, C.S.S.R., the author of a life of Garcia Moreno, tells us that the deputies of the three states that constituted the new republic, viz., Quito, Guayaquil and Cuenca, patched up a constitution based on that of the former state of Colombia, but of a still more pronounced republicanism. It granted the rights of suffrage to all adult residents who owned a little property; this charter was to dominate all conditions; the President was to hold office for four years; all extraordinary powers were to be supported, even if the enemy were battering down the gates of the capital; all foreigners, military or civil, were to be naturalized. Such were the articles of this ultra liberal charter.

General Flores was elected first President and, although not an

Ecuadorean by birth, he served with distinction in the struggle for independence under the great South American liberator, Simon Bolivar, and deserved much from the new republic. Everything went well for a time, but militarism, in its worst form, asserted itself, and the republic realized the folly of making citizens of a foreign soldiery, who did not hesitate to overrun the country, pillaging as they went. Flores, who made these soldiers his bodyguard, refused to restrain them in any way and even went so far as to bestow honors upon their leaders in spite of the protests of the native Ecuadorians.

Conditions such as these were well calculated to lead the country to perdition. Agriculture and commerce suffered most; the national treasury was exhausted and employees in the state department were left without occupation for want of resources with which to compensate them for their labor. Famine and ruin threatened the country. In the meantime, Flores, like another Nero, spent his time in banqueting with his gay associates. To see their festive *tertullias* no one could have imagined that the army and the people had reached the limit. Flores was openly charged with receiving moneys in a manner that reflected little honor on his high position; he was likewise accused of giving his country over to the control of foreigners, while the eminent men who had made sacrifices for the public good were ignored, while the President did not hesitate to threaten the better class of citizens at the capital. A disastrous war broke out with New Granada (now known as Colombia) and Flores succeeded in arousing the country against him, but a leader was needed. One after another appeared on the scene, each one worse than the other, Rocafuerte among them. He secularized the University and left no effort untried to do the same with the elementary schools. He was, however, superior to Flores in some respects. He restored the finances of the country, secured peace and order and through his inexorable severity subdued the lawless soldiery.

It would take too long to narrate all the events that followed. Enough to say that conspirators were bent on recovering lost power; Flores at the Court of Spain courting the good graces of Queen Cristina, and recruiting some three hundred men in Ireland, and the important aid he was to realize from his intrigues with Spain are too well known to the student of South American history to be mentioned here. Rocafuerte received private information of all this and prepared for it. Then again Ecuador alone was not doomed to be the victim; all the South American republics were in danger of coming once more under Spanish rule, and they prepared to counteract such a condition.

Garcia Moreno was not asleep all this time; he realized that the hour of action was at hand and setting aside all personal sentiment for the sake of his country, offered his services to Rocafuerte. This powerful adjunct was not to be refused. Moreover, Garcia's friends, who, like himself, were patriots, were ready to sacrifice private interests for the public weal.

Garcia started a paper—the *Vengador*, in the first issue of which he sounded the note of warning in the plainest possible terms, and called upon the people to rally around the standard of their liberties. Flores was not without his partisans. Militarists and unprincipled politicians were still loyal to him, they had served him in the past; shared in his revelries and hoped to do so again, but the appeal to the people in the *Vengador* not only aroused the patriotic sentiments of the Ecuadorians, but that of the people of all the South American republics and even gained friends for their cause in Europe. England saw her commerce and other interests menaced and through Lord Palmerston intimated its disapproval of the plan to fit out a fleet in Spain for the encouragement of revolutions in South America. The pressure was so great that Flores was obliged to disband his Irish and Spanish followers, and abandon his intrigues for a time at least.

Garcia Moreno realized that Flores was not to be deterred by this disappointment. The misguided man had friends in Ecuador. The foreign janizaries he had pampered during his administration longed for a renewal of the revelries they had enjoyed and were ready to renew the depredations on the native population.

While Garcia Moreno was ready and willing to serve his country, he was far from being in sympathy with the government of Rocafuerte, and consequently refused to accept compensation in any form for his services when it was offered to him. He soon started another paper which he called *El Diablo*, in which he expressed his attitude towards the enemies of his country in no equivocal terms, and when asked what this *Devil* was intended to do, he replied: "I am neither an official nor an office-hunter, like so many *pobre diablos* (poor devils) I see around me; I am not a soldier, like the many charlatans, who make a boast of the many blows they never struck; I am not a politician, ready to sell myself for personal preferment; nor am I a janizary, because crime is hateful to me. The loyal friend of our unfortunate people whose only hope seems to be the devil, I am here ready to fight those who would destroy it, and to dispel the dust that fills the air and hides the arrival of the Flores hordes."

Naturally the jeering verve of *El Diablo* was not lost on the modern Iscariots who, hailing their country with a kiss, were ready to plunge

their cowardly daggers into its back. They longed to beat down the walls of another Troy, and open the way for the Bronze Horse filled with the janizaries of the ambitious Flores.

For the first twenty years of its existence Ecuador was under the rule of the "liberal party"; men whose "liberalism" consisted in favoring all laws that did not interfere with their avarice and opportunities for plundering the public treasury and occasionally private property. Then, too, no law that interfered with their pleasure and revelries was to be tolerated. Religion might be tolerated so long as it could be used as a tool by the civil power, hence the religious orders were a source of trouble—means must be taken for their expulsion. Of course, the Jesuits were to be the first victims. They had been driven out of New Granada because of Masonic hostility to the Church, and Garcia Moreno was anxious to have them in Ecuador. He had very serious misgivings as to the attitude of his government towards them. After mature deliberation he arranged for their reception, and the good Fathers, instead of going to England, as was their intention, sailed for Ecuador.

But the good Fathers were not yet in peace. On the ship that was taking them to their supposed new refuge they were astonished when they recognized the form of their arch-enemy, General Obando, the author of all their troubles in New Granada. His mission was, no doubt, to close every door in America against the Sons of Loyola. The Fathers were not without their misgivings, but Garcia Moreno was more fixed in his purpose. No sooner had the missionaries reached Guayaquil than he hastened to Naboa, then in control of affairs, and urged the cause of the exiles so pathetically that Naboa yielded and the missionaries lost no time in going to Quito.

Obando also hastened to the authorities and stated the object of his visit. He was quickly told that he was too late, and, moreover, that Ecuador was fully able to manage its own civil and religious affairs without any assistance or interference from New Granada. Poor Naboa little dreamed of the trouble he was bringing upon himself in the near future.

The National Convention was in session at this time for the nomination of a new President, but that question was forced to give way to that of the admission of the Jesuits. After a long and heated debate the cause of the good Fathers triumphed, and the Church that had belonged to them before their suppression, together with a spacious building to be used as a residence and college, was accorded to the Fathers. It seemed for a moment as if the cause of religion and morality was in a fair way of resuming their beneficent work, but the Orient, full of rage at its disappointment, resumed its plot-

ting, and their first step was to bring about the removal of the aged Naboá from the presidency of the Republic, and, of course, the immediate expulsion of the Jesuits. Emissaries from the lodges in New Granada sought to arouse the people against the Jesuits and conditions became so serious that the Ecuadorians found it necessary to send troops to the frontier. The excitement was growing in intensity, and Garcia Moreno, who was held up as the author of all the trouble, fearlessly published a pamphlet entitled *El Defensor de los Jesuitos*, in which he stated his position not only as a Catholic but as a lover of his country. He exposed, in the clearest terms, the machinations of his enemies and finally turned public opinion in his favor. New Granada was again given to understand that it felt competent to attend to its own affairs without any assistance from its neighbors. Naboá calmly "pursued the even tenor of his way," and Urbina was obliged to realize that he had no part in the ruling of Guayaquil.

Garcia Moreno issued a third paper, entitled *La Nacion*, in which he attacked the Orient and its members in the most fearless manner, and we regret that our space will not permit us to translate some extracts from his articles.

Moreno, though only thirty-two years of age, and with a brilliant future before him, was not unmindful of the consequences that were sure to follow the disorders that prevailed in his country and that were sapping its very foundations, and he was willing to make every personal sacrifice his country demanded of him. He had not long to wait. Urbina, enraged at the exposure of his nefarious transactions, decided on the arrest of Moreno. The latter, as soon as he heard of this decision, repaired at once to the Grand Plaza, or public square of the city, and awaited the execution of the mandate. He desired his arrest to take place in full view of his fellow citizens. With two of his intimate friends he met the officers of Urbina, and with his companions submitted without the least opposition. They were taken to a prison and when night came on, under cover of darkness, Moreno made his escape. After a hard journey he reached the frontier and found refuge in a small Peruvian village; where he awaited coming events.

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(To be continued)

SOME TRACES OF SCHOLASTICISM IN SHAKESPEARE.

NOT the least of the influences coöperating in the revival of English literature in the sixteenth century was the Italian Renaissance. True, England responded more slowly to the culture of this movement than did France or Spain; nor did this new spirit, when it reached England, touch all forms of intellectual and artistic aspiration. It inspired no original music, it gave birth to no original painting, it aroused no scientific curiosity: but it left the Elizabethan literature the glory of the world. The Italian impress upon English literature came both through the Renaissance literature of France and as a result of English travel in Italy and of Italian visitors to England. Whatever the operation, the evidences are clear. Sir Thomas More's first publication was a translation of a biography of Pico della Mirandola, a Florentine philosopher; Sir Edward Hoby first translated Castiglione's "*Il Cortegiana*," the very text-book of the new culture, containing an oration assigned to Cardinal Bembo on the true conceptions of beauty and love. Sir Philip Sidney came into personal contact with the artistic and literary manifestations of the new era, and his writings attest the fact. Spenser borrows from Ariosto and Tasso; the Elizabethan sonnet owes much to Petrarch; and Bacon admits his indebtedness to Telesio of Cosenza and to Pico della Mirandola.¹

With the Elizabethan atmosphere so charged with Italian thought and fancy, it is natural that Shakespeare should show some influence of the Renaissance. In "*Love's Labour Lost*" (IV., iii.), he quotes in Italian a reference to the beauties of Venice; Hamlet (III., ii.), commenting on the Players' play, remarks that "the story is extant, and written in very choice Italian"; in the "*Winter's Tale*" (V., ii.), a statue is declared to be "newly performed by that rare Italian master, Julio Romano," an eminent pupil of Raphael; the scenes of his chief comedies and of many of the tragedies are laid in Italy. But it is in the sources of many of Shakespeare's plays that the Italian influence is especially seen. Though history, legend and tradition of every literature are embodied in the works of this great writer, it is familiar knowledge that he hewed many of his plays out of Italian stories. The tale of Othello was first

¹ For discussions of Italian influences on Shakespeare and on English literature generally, see Sir Sidney Lee, "*Shakespeare and the Italian Renaissance*"; "*Cambridge History of English Literature*," III., ch. i.; James Gregg, "*Shakespeare's Scenarios*"; Thomas O'Hagan, in "*Catholic Reading Circle Review*," December, 1897.

told by Cinthio; in fact, its translation out of the Italian before Shakespeare used it is unknown. The same author likewise devised the plot of "Measure for Measure," "Twelfth Night," "Romeo and Juliet," "Much Ado About Nothing," "All's Well That End's Well," "Cymbeline," and the Roman plays of "Coriolanus," "Antony and Cleopatra" and "Julius Cæsar," may all be traced to Italian sources. Bandello, a Dominican monk and Bishop, is the parent of the leading episodes of the first three plays just named; Ariosto, Boccaccio and Petrarch inspired others. Other plays, taken from romances of English authorship, were originally Italian stories. Finally, the "Sonnets" everywhere show the influence of the Italian philosophy of love first taught by Plato and purified by St. Augustine, Boetius and St. Thomas.

Italian philosophy permeated Italian literature. Those in Italy engaged in art and literature esteemed it an honor to be termed philosophers. To mention but a few: Michelangelo wrote sonnets in which beauty is ever linked with truth; Vico, the poet, traced the fundamental laws of society; Petrarch, the father of the sonnet, quoted St. Paul and St. Augustine in his discourses; Tasso, the author of "Jerusalem Delivered," composed philosophic dialogues; Dante, it is sufficient to name. Now the philosophy which these philosopher-poets were "setting to music" was the philosophy of Peter the Lombard, of St. Thomas Aquinas, St. Bonaventura, Ægidius Colonna, and of Albertus of Brescia, all of the scholastic mould.

With this influence of Scholastic-colored Italian poetry upon Shakespeare a real one, it is not surprising that one discovers in his writings texts concerning God, man and the universe, having a more or less distinct trace of scholasticism about them, together with evidences of scholastic terminology and imitations of scholastic form and method.

Consideration of the many quotations concerning God and His attributes would fall rather in the domain of theology than of strict philosophy, and for this reason no attempt is here made to follow out the labyrinths into which these references lead. The omniscience of God, for example, and our own limitations are expressed thus:

"Inspired merit so by breath is barred;
It is not so with Him that all things know."

—("All's Well That Ends Well," II., ii.)

To God's mercy Shakespeare makes most pertinent reference:

"The quality of mercy is not strained. . . .
It is an attribute of God Himself."

—("Merchant of Venice," IV., i.)

The word "quality" here suggests a philosophical distinction that might have been in the author's mind. The notion of God's justice appears frequently: in "King John" (IV., iii.), the "Winter's Tale" (III., ii.), "Richard III." (I., iv), and elsewhere. Shakespeare's translation of Divine concurrence—"To see how God in all His creatures works" ("Henry VI.," Pt. 2, II., i.)—is not far from the thought: *Deus operatur in omni ente secundum medium ipsius*; and to say, "There is a divinity that shapes our ends" ("Hamlet," V., ii.), is but to give expression to the doctrine of Divine Providence. Numerous other lines could be cited in reference to God, and to the copious use Shakespeare makes of the Bible in allusion, metaphor and quotation.²

Humanity is the middle term between God and the universe. Man is a microsm, a summary of the creation, and the image of the Creator. "What a piece of work is man! How infinite in faculty! In form, in moving, how express and admirable! In action, how like an angel! in apprehension, how like a god! The beauty of the world! the paragon of animals!" ("Hamlet," II., ii.). Here we have man's nature sublimely expressed, and in perfect consonance with our philosophic ideas. Corresponding to the terms employed in this passage, we have such nomenclature as *forma* or *figura*, *motus*, *actio*, *apprehensio*. *Homo est inter animalia perfectissimus*, means nothing else than man is "the paragon of animals." Man has been placed on the confines of two worlds, participating both in the world of corruptible beings and the world of incorruptibility. While it is true, "All that live must die," this is merely a "passing through Nature to Eternity" ("Hamlet," I., ii.), or, as our philosophy puts it, *Per naturalia ad Deum pervenitur*. Man as a whole, then, is composed of body and soul, and is incomplete if one of these parts be lacking. Each part is again subdivided into organs, senses, faculties, etc. An amusing allusion to this terminology is made in the "Merchant of Venice" (III., i.), when Shylock asks: "Hath

² See the author's study of Falstaff's dying words in "Catholic Reading Circle Review," January, 1898. Many have written concerning Shakespeare's religious beliefs. From the Catholic viewpoint, the fullest treatment is Henry S. Bowden's "The Religion of Shakespeare" (London, New York, etc., 1899), drawn chiefly from the writings of Richard Simpson. Shakespeare's characters "tell their beads," "go to confession," "pray for the dead," "Invoke the saints," etc. Allusion is undoubtedly made to the doctrine of Purgatory ("Hamlet," I., v), when the Ghost speaks of being "confin'd to fast in fires, till the foul crimes done in my days of nature, are burnt and purged away." None but a Catholic would have paid this tribute to the Blessed Virgin:

"What angel shall
Bless this unworthy husband? He cannot thrive
Unless her prayers whom Heaven delights to hear
And loves to grant, reprieve him from the wrath
Of greatest justice."—"All's Well That Ends Well," III., v.)

not a Jew hands, organs, dimensions, senses, affections, and passions?"

"Therefore doth Heaven divide
The state of man in divers functions
Setting endeavor in continual motion
To which is fixed as an aim or butt
Obedience." —("Henry V.," I., ii.)

Reference may be said to be made here to the Scholastic idea of *conatus*, or that natural proclivity existing in the faculties for exercising their peculiar actions—*Omnis facultas habet proprium conatum ut finem*. These tendencies, though they apparently work in opposite directions, nevertheless have a primordial impulsion in one direction. Shakespeare, using the very analogies of St. Thomas and the Schoolmen, continues:

"I this infer
That many things, having final reference
To one consent, may work contrariously:
As many arrows loosed several ways,

Fly to one mark, as many ways meet in one town."—(*Ibid.*)
The similes of the arrow and the ways were common to the Schoolmen. St. Thomas explains the finality of human actions, "*sicut sagitta ad metam a sagittario missa.*"

The definitive presence of the soul in man, contrasted with God's omnipresence, which the Scholastics signify by saying, *Deus est ubique, quia ubique operatur; anima non est ubique, quia non ubique operari potest simul*, finds expression also in our poet:

"Nor can there be that deity in my nature
Of being here and everywhere."
—("Twelfth Night," V., i.)

There are references, also, in Scholastic phrase and sense, to the intellectual phenomena of sensations, judgment, "without the which we are pictures or mere beasts" ("Hamlet," IV., v.), and reason, "the perfection of our nature" and the essential distinction between man and the brute world.

"Sure He that made us with such large discourse
Looking before and after, gave us not
That capability and god-like reason
To rust in us unus'd." ("Hamlet," IV., iv.)

"Discourse" (from *discurrere*) was the consecrated term of the Schoolmen, expressive of man's reasoning powers. Likewise, "thought is free" ("Twelfth Night," I., iii.); and, using a phrase of St. Bernard's, "Our bodies are gardens, to the which our wills are gardeners" ("Othello," I., iii.).

The science of being, in general, took its starting point from the notions of substance, form, and matter. Being, passing through a series of rigorous deductions, became successively, goodness, unity, and truth. Unity was the common condition of all existences; Truth, the sovereign good of intelligences; Good, the term of all the tendencies of nature and of all wills. The expressions of Scholasticism, "*Omne ens est bonum*," "*omne malum radicatur in bono subiecto*," "*malum non est negatio pura sed privatio boni*," find translation in Shakespeare's line:

"There is some soul of goodness in things evil."
—("Henry V.," IV., i.)

The world, like man, was created by the same First Cause.

"The heavens themselves, the planets and this centre
Observe degree, priority, and place,
Insisture, course, proportion, season, form,
Office and custom in all line of order."

(Troilus and Cressida," I., iii.)

Omnia in numero, pondere, et mensura, operatus est Dominus. God also endowed the universe with certain laws according to which nature exerts her actions always in the same way. Nor can this uniformity of nature ever be disturbed except when the Author of Nature sees fit to perform a miracle, in which case the law is set aside for the time. Shakespeare, in "All's Well That Ends Well" (II., iii.), has this passage concerning miracles:

"They say miracles are past, and we have our philosophic persons to make modern and familiar things supernatural and causeless. Hence it is that we make trifles of terrors, ensconcing ourselves into seeming knowledge, when we should submit ourselves to an unknown fear."

The examples of terminology and imitations of Scholastic forms to be found in Shakespeare are even more interesting. We find in "Troilus and Cressida" (I., ii.), the expression:

"They say he is a very man *per se*."

In "Julius Cæsar" (II., i.), our word *phantasma* is made use of:

"Between the acting of a dreadful thing
And the first motion, all the interim is
Like a phantasma."

How vividly does Falstaff saying, "I deny your *major*" ("Henry IV., Pt. I, II., iv."), recall those disputations of scholars, old and young, standing in the highways discussing, with all the eagerness and animosity of their spirit, each syllable of an essay or discourse! Controversy was the passion of their lives. They spread out arguments like nets, they set syllogisms as ambushes, and by innumerable distinctions and contradistinctions proved and disproved in

turn the same proposition. These syllogisms and forms of argumentation Shakespeare has parodied and imitated through the mouths of his clowns and jesters. A translation of our *secundum quod* and *relate ad* amuses us in this:

"Truly Shepherd in respect to itself, it is a good life, but in respect that it is a shepherd's life, it is naught. In respect that it is solitary, I like it very well, but in respect that it is private, it is a very vile life. Now, in respect that it is in the fields, it pleaseth me well, but in respect it is not in the court, it is tedious. Hast any philosophy in thee, Shepherd?" ("As You Like It," III., ii.)

The last sentence alone, sarcastic though it be, gives proof that imitation has been attempted.

Three well-known Scholastic distinctions are referred to in the following:

"It must be *se offendo*: It cannot be else. For here lies the point: if I drown myself wittingly, it argues an act; and an act hath three branches: it is to act, to do, and to perform. Argul [Ergo], she drowned herself wittingly." ("Hamlet," V., i.) Reading the premises of this syllogism one is reminded of *actus actuans*; *actus quo quis agit*; *actus aliquid faciendi*.

The following is a perfect syllogism in form:

"The shepherd seeks the sheep, and not the sheep the shepherd. But I seek my master and my master seeks not me. Therefore I am no sheep." ("Two Gentlemen from Verona," I., i.) Here is another, from "Twelfth Night" (I., v.):

"Anything that's mended is but patched: virtue that transgresses is but patched with sin; and sin that amends is but patched with virtue: if that this simple syllogism will serve, so: if it will not, what remedy?"

Finally, in "As You Like It" (III., ii.), there is an example of a polysyllogism, almost a *sorites*:

"Why, if thou never wast at court, thou never sawst good manners. If thou never sawst good manners, then thy manners must be wicked; and wickedness is a sin, and sin is damnation. Thou art in a *parlous state*, Shepherd."

In the years following the Reformation, the *ne plus ultra* of condemnation was to brand any thought with the name "Scholastic." New theories were evolved, and even within the Church the doctrines of Pythagoras, Plato, and Aristotle were given new interpretations, and in an anti-Scholastic sense. But these attempts were failures. Shakespeare gives evidence in his works that he was not touched by these new systems. He is distinctly Thomist in his doctrine of the genesis of knowledge and its objective character; the power of reflection as distinctive of rational creatures; the formation of habits; and the operation of the imagination ("Midsummer Night's Dream," V., i.).

"That man, how dearly ever parted
 How much in having, or without or in,
 Cannot make boast to have that which he hath,
 Nor feels not what he owes, but by reflection.
 The beauty that is borne here in the face
 The bearer knows not, but commends itself
 To others' eyes; nor doth the eye itself,
 That most pure spirit of sense, behold itself,
 Not going from itself; but eye to eye oppos'd
 Salutes each other with each other's form;
 For speculation turns not to itself,
 Till it hath travell'd and is mirror'd there
 Where it may see itself."

—("Troilus and Cressida," III., iii.)

"That monster, custom, who all sense doth eat,
 Of habit's evil, is angel yet in this
 That to the use of actions fair and good
 He likewise gives a frock or livery
 That aptly is put on.
 For use almost can change the stamp of nature
 And either master the devil, or throw him out,
 With wondrous potency." ("Hamlet," III., iv.)

He "in no way approves" the Pythagorean doctrine of the transmigration of the soul ("Twelfth Night," IV., ii.), which was the butt of Scholastic ridicule; but the teaching of Aristotle was not for the superficial, "whom Aristotle thought unfit to hear moral philosophy" ("Troilus and Cressida," II., ii.).

It would show shallowness of criticism to conclude from these few, perhaps insufficient, expressions and thoughts that Shakespeare was imbued with Scholastic philosophy, and from this to argue that he was a Catholic. If these evidences could be so multiplied and marshalled as to reduce the latitude of the debatable, they would undoubtedly help to determine the truth of Shakespeare's religion. Otherwise, the result is simply curious and interesting that in Shakespeare, although not so exuberant and pointed as in his contemporary, Drummond, who was accused of "smelling of the Schools,"³ there are *some* traces of Scholasticism.

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Washington, D. C.

³ See E. T. Shanahan on the "Idea of God in the Universe," "Catholic University Bulletin," January, 1898. Since this article was written, further references to Shakespeare's use of scholastic thought are given by Maurice DeWulf, "Philosophy and Civilization in the Middle Ages" (1922), pp. 176-177. For example, in "Hamlet," I., v., there is reference to the "table of my memory," and

"All forms, all pressures past

That youth and observation copied there."

This is an allusion to the "formae et species impressae." Again, it is pointed out, Hamlet uses scholastic thought when he says:

"Sense sure you have,

Else could you not have motion" (III., iv.), recalling the doctrine that movement presupposes sense-perception.

CATHOLIC SCHOLARSHIP IN MODERN FRANCE

Part II.

"It is precisely because the Christian religion is so exact and true, that it is so eminently favorable to the progress of the sciences, and to the noblest faculties of our intelligence." (Baron Cauchy.)

"**M**EN of science in America," recently wrote Professor Osborn, of Columbia University, in a friendly exchange of scholastic greetings, "unite in sending to their confrères in France, an expression of their gratitude for the inspiration of the men of genius of France of the past and present, for the life and work of Descartes, Lavoisier, Ampère, Buffon, Cuvier, Lamarck, Pasteur, and others too numerous to name."¹ In penning these sympathetic lines, the author of "Men of the Old Stone Age" had certainly no thought of religious discrimination in his mind. His choice of names was dictated simply by the desire to select those most truly representative of French genius and learning. It is interesting therefore to note that, of the scholars mentioned, all were believers, and all, with the single exception of Cuvier, Catholics. It would, however, be unsafe to conclude that the same percentage of Catholic scholarship which marks the group of Professor Osborn's choice, or even as large a percentage as characterized the early half of the nineteenth century, would distinguish its close and continue to hold its own into the twentieth century. With the exception of Pasteur, the men just named belonged to an older school of thought, were representative, in fact, of the old *régime*, but with the dawn of a new century, new sciences, new viewpoints have arisen, in which materialistic concepts figure largely, so that our critics may fairly contend that for the French scientists of the Third Republic quite a new census of religious outlook must be taken. Confronted as we are with the amazing accumulation of prehistoric "finds" and undigested data in the realms of anthropology, paleontology and archeology—data undreamed of a century ago—with anti-theistic theories of evolution rife, and the scientific atmosphere of the day redolent of the dubious revelations of hypnotism and, so-called, psycho-analysis, it is not surprising that some, even among her own children, may have feared lest the Church, handicapped by adverse legislation,

¹ Henry Fairfield Osborn: "For France," p. 308.

should have been unable to keep fully abreast of her opponents in those fields which materialistic science would claim as peculiarly her own. In drawing up our new census of Catholic scholarship, then, it is particularly encouraging to find the author of the lines just quoted sitting as a disciple at the feet of two Catholic archeologists whom he elected as his scientific guides and to whom he has dedicated his well-known work on anthropology.² At the time of the publication of his "Men of the Old Stone Age," Professor Osborn had but recently returned from a scientific tour in company with three distinguished paleontologists, two of whom were Catholic priests, whose warm admirer and pupil he seems proud to proclaim himself. The words of his dedication run:

"To my distinguished guides

Through the upper paleolithic caverns of the
Pyrenees, Dordogne, and the Cantabrian mountains of Spain,
Emile Cartailhac: Henri Breuil: Hugo Obermaier."

A little later, Professor Osborn explains more fully his debt to the two clerical members of this threefold dedication, Abbé Breuil and Father Obermaier. He writes:³ "This work represents the coöperation of many specialists on a single, very complex problem. I am not in any sense an archeologist, and in this important and highly technical field, I have relied chiefly upon the work of (Father) Hugo Obermaier, and of Dechelette in the Lower Paleolithic, and of (Abbé) Henri Breuil in the Upper Paleolithic. Through the courtesy of Dr. Obermaier, I had the privilege of watching the exploration of the wonderful grotto of Castillo in Northern Spain, which affords a unique and almost complete sequence of the industries of the entire Old Stone Age. This visit and that to the cavern of Attamira, with its wonderful frescoed ceiling, were in themselves a liberal education in the prehistory of man. With the Abbé Breuil, I visited all the old camping stations of Upper Paleolithic times in Dordogne, and noted with wonder and admiration his detection of all the fine grades of invention which separate the flint makers of that period. . . . It is a unique pleasure," he continues, "to express my indebtedness to the Upper Paleolithic artists of the now extinct Cro-Magnon race, from whose work I have sought to portray, as far as possible, the mamalian and human life of the Old Stone Age. While we owe the discovery and early interpretation of this art to a generation of archeologists, it has remained for the Abbé Breuil, not only to reproduce the art with remark-

² "Men of the Old Stone Age," p. 1.

³ Preface, pp. ix-xi.

able fidelity, but to firmly establish a chronology of the stages of art development."

On the work of Father Obermaier, as a Bavarian savant, we cannot here dwell. That of Abbé Breuil presents us with a wonderful narrative of scientific achievement, tempered by priestly devotion, which has been charmingly outlined by Dr. James J. Walsh in his "Catholic Churchmen in Science."⁴ The Abbé is, however as Professor Osborn tells us, only one of a long series of archeologists whose labors have shed lustre upon their native land and contributed to obtain for her the high place she holds in archeological discovery. In this series of French scientists, Catholic and even clerical names, meet us with honorable frequency.

For the past fourscore years, Central and Southwestern Europe, notably France, has been, as we know, the happy hunting ground of the anthropologist and archeologist. Those of us who have studied with interest the history of their discoveries know how startling and profound was the impression made, in earlier days, upon the learned world, especially by any discovery involving human remains or any implement supposedly from the hand of man; from the find of the Constadt and Neanderthal skulls to the later and more abundant remains, found chiefly in France; for France has been, and still continues preëminently to be, the land of prehistoric research. Hence, the importance of paleontological studies in that country and the number of scientists devoted to their pursuit. "The history of anthropology, prehistoric archeology, ethnology and ethnography can be traced in France perhaps better than in any other country in the world," write two prominent American professors.⁵

"In the field of prehistoric archeology, France has played the leading part. This is due to some extent to the rich field for archeology to be found in France. It is significant that the current modern name of each of the periods of the paleolithic culture in Europe is a French name associated with a site where typical forms of stone implements were found." "In the history of paleontology," writes Professor Williston, of Chicago,⁶ "there is no nation so rich in memories as France, none held in so great regard by students." Geikie and Haddon attribute the same archeological preëminence to the land of Buffon, Cuvier and Lamarck, the acclaimed progenitors of paleontology. "The caves of France, which are probably more numerous than those of any other country in Europe," writes Pro-

⁴ "Abbé Breuil and the Cavemen Artists": Series 3d.

⁵ A. M. Jozzer, Harvard University, and C. H. Hawes, Dartmouth: "Science and Learning in France," pp. 21 and 22.

⁶ The same, p. 127.

fessor Geikie, "have yielded the most important and prolific results. Cave exploration, carried on through a long series of years by many devoted experts across the Channel, has indeed given rise to a most voluminous literature,"⁷ while Haddon⁸ adds that "to indicate the share which France has had, and maintains, in the elucidation of prehistoric anthropology," it is only necessary to mention the workers and their work, of whom he proceeds to give a series.

In dealing with a science so nationally prominent and having so important a bearing on many Scriptural issues, the Church, with her usual wisdom, has thought it well that a most complete knowledge of facts should be in the possession of her own children, and has sought to equip, especially among her student clergy, a trained body who could furnish expert yet friendly testimony as to controverted facts or doubtful inferences. She has passed no sweeping condemnations, and pronounced few judgments, save where the integrity of Scriptural teaching demanded it. But she has insisted upon thorough and painstaking research with a patient coördination of data as a precursor and prerequisite for dogmatic theorizing. If, as Professor Haddon reminds us;⁹ "the premature adoption of an hypothesis is a sin against the scientific spirit," then anthropology has been a much sinned against science. Against such sinful haste, against an evidently biased interpretation of facts, the Church has protested, but it is a misconception to suppose that because of the extravagant theories of certain extreme and rationalizing evolutionists, the Church has discouraged the pursuit of anthropological studies among her own children or has sought to turn their steps from such hazardous fields into securer pastures. To realize how far she has pursued a directly opposite policy, we have only briefly to review the work of a few more eminent priestly anthropologists and archeologists. It was Abbé Bourgeois who, in 1867, with Abbé Delaunay, defended the human workmanship of the flints at Thenay,¹⁰ whose evidence, if accepted, would have placed primeval man in the Tertiary Period. It was the Abbé de Ville-neuve who, in connection with E. Rivière, M. Boule, and E. Cartailhac explored the caves of Grimaldi, near Mentone, in the South of France, whose history has since become so famous.¹¹ It was the Abbé Bardon with the Abbés A. and J. Bouyssonie, who discovered the human skeleton of the Mousterian Period, in the Grotto

⁷ "Antiquity of Man in Europe," p. 67.

⁸ Alfred C. Haddon: "History of Anthropology," p. 150.

⁹ The same, p. 66.

¹⁰ Zahm: "Church and Science," p. 112. Clodd: "Primitive Man," p. 48.

Haddon: "History of Anthropology," p. 131.

¹¹ Geikie: "Antiquity of Man," p. 70.

of La Chapelle Aux Saintes,¹² in 1901. It is the Abbé Hermet who has "won scientific fame by his investigations in Neolithic France,"¹³ and interest in its prehistoric monuments. It is the Abbé Laville,¹⁴ who has charge of the "Musée Oceanographique" and "Institute de Paleontologie," that truly royal foundation for the study of prehistoric archeology established by the Prince of Monaco, of which Professor Osborn says: "Never was a more fortunate union of genius, opportunity and princely support."¹⁵ Finally, it was the Abbé Guilbert who was the instructor of the young Henri Breuil and who, himself an antiquarian and author of a work on "Origins," was quick to note the bent of his gifted pupil and direct him toward archeology.¹⁶

When we turn to study, historically, the progress of this science in France, we find the credit of pioneer work attributed by all to the Catholic antiquarian, Boucher de Perthes, or more fully, Jacques Boucher de Crevecoeur de Perthes. "It is interesting to reflect," writes Geikie in his "Antiquity of Man,"¹⁷ "that the river drifts of the Somme Valley were the first to attract the attention of geologists and archeologists." This was due to the discoveries made many years ago by an enthusiastic French antiquarian, Boucher de Perthes, to whom must be assigned the credit of having been the first to direct the attention of the scientific world to the occurrence of human implements associated with the remains of extinct animals, in bed of undisturbed Pleistocene [*i. e.*, post-tertiary] gravel and sand. It was not, however, until after cave exploration had convinced geologists of the antiquity of man and his contemporaneity with the Pleistocene mammals, that the importance of the discoveries in the Somme Valley was realized. Boucher de Perthes was a scion of the lesser French nobility. His father, a distinguished botanist, had come under the notice of Napoleon and received from him the directorship of the "Douâne" at Abbeville. To this post the younger de Perthes succeeded in 1825, having been previously employed by Napoleon on several important missions. After the Restoration, he continued to direct the customs at Abbeville, where he spent the remainder of his life in archeological research. It must be noted here that this pioneer work was undertaken in the interests of religious orthodoxy.

Since the day when the young French nobleman began his excavations, science has, in some important respects, effected a com-

¹² "L'Anthropologie," vol. xix., p. 513. Osborn in bibliography appendix.

¹³ "Science and Learning in France," p. 24.

¹⁴ Same, p. 23.

¹⁵ Osborn, p. xi.

¹⁶ Walsh: *Cath. Churchmen in Science*, 3rd. p. 159. *Cath. Ency.*, v. 14. p. 644c.

¹⁷ "Antiquity of Man," p. 106.

plete *volte face*. Geology was then in its infancy, and geologists made the mistake of attributing all traces of diluvial submergence to the Noatic Deluge. Such supposed, though mistaken, confirmation of the Mosaic record was most displeasing to the skeptics of the time. Voltaire, for example, absolutely refused to accept the evidence as to the presence of fossil shells of marine crustacea in Alpine or inland valleys. Such discoveries were "deceptive"; the shells were "freaks of nature," *lusus naturae*, in no way indicative of the action of water, until theology took a further step, and propounded the theory of the Ice Age, with its subsequent series of diluvial epochs, when—presto, change! shells lost their obnoxious character, ceased to be *lusus naturae*, and at once took their rightful place as evidences of geologic submergence. Again, in early archeological excavations, all objects found beneath the soil were summarily disposed of as Roman remains, or possibly Druidic remains. It soon became evident, however, that such "finds" were of too great antiquity to be so classified; moreover, they were to be seen in countries innocent of Roman occupation. No theory of Roman remains could apply to the Kitchen Middens of Denmark and Scandinavia; or even to the Lake Dwellings of Switzerland. It was then timidly suggested that such remains might be traces of the existence of antediluvian man. Hence, two of the most important works of Boucher de Perthes, in which he embodies the story of his discovery of flints and other human "artifacts," bear the titles of *Antiquités Celtiques et Antediluviennes* and *De l'Homme Antediluvien et ses Oeuvres*.¹⁸

It required no small courage, however, to face the scorn of the skeptical, and our archeologist waited years before making public his discoveries. In 1838, he submitted some to the "Society of Emulation," at Abbeville, of which he was president. The following year he exhibited some before the Institute at Paris. But it was not until 1858, when he was visited by Sir Joseph Prestwich, Charles Lyell and other distinguished English geologists that he received sufficient confirmation of his views to lead him to publish his "monumental works," which gave the first great impetus to French archeology and first bore witness, on the continent at least, to the existence of primitive man. We say on the continent, since the "first flint implement ever found in unmistakable association with remains of extinct animals," had, a little earlier, been discovered by an English Catholic priest, the Rev. J. MacEnery, chap-

¹⁸ "Recollections of Boucher de Perthes." Lady Prestwich Essays. Also Ency. Brit.

lain of Tor Abbey, at Kent's Cavern, England.¹⁹ Geology now took a still further step, pronouncing the archeological remains found to be of a far greater age than any accepted chronology of Scripture would permit; to belong, in fact, to the Quaternary Period. The term "Antediluvian" was dropped and that of "Paleolithic Man" substituted in its stead, and anthropology became a recognized science.

We have now to trace the history of a close successor of Boucher de Perthes, the Catholic paleontologist, Joachim Barrande. Born at Sangues, in the Department of Haute Loire, in 1799, he was educated at the Ecole Polytechnique, at Paris, and later, chosen by Charles X. to be the tutor of his grandson, the Duc de Bordeaux, also known as the Count de Chambord. Exiled with the royal family, he devoted his life to the then entirely unexplored field of paleontology. His interest was early awakened in the fossil remains of the great Silurian System of Bohemia. For ten years, between 1840 and 1850, he devoted himself to a personal survey of this most interesting region, making frequent tours on foot in detailed examination of its strata. His efforts were attended with success. Quarries were opened and workmen engaged to search for fossils, until, after forty-three years of research, he was enabled to embody the results of his profound labors in his great work, "*Le Système Silurien du Centre de la Bohême*," a work which Von Zittel tells us, in his "*History of Anthropology*," stands almost unrivalled in paleontological literature. His other works include: "*Colonie dans le Bassin Silurien de la Bohême*," "*Documents sur la Faune Primordiale et le Système Taconique en Amérique*," "*Céphalopodes*," "*Etudes Générales*," and others. He died in 1883, at the advanced age of eighty-four, leaving his valuable collection of fossils and library of natural history to the Museum of Prague. If we may judge of his spirituality by the principles he instilled into his pupil, the Count de Chambord, whose purity and integrity of character is acknowledged on all hands, it must have been of high order.²⁰

We turn now to a distinguished explorer of the caves of southern France, a third representative Catholic paleontologist, Jean Francois Albert du Pouget, Marquis de Nadaillac. A descendant of a noted French family, the young Marquis, not unnaturally, devoted his earlier years to political life, and served, from 1871 to 1877, as pre-

¹⁹ Haddon: "*Hist. Anthropology*," p. 143. We may mention in passing that Mercati, physician of Clement VIII, seems to have been the first to pronounce the stone adzes and axe-heads, regarded in early times as thunderbolts, to have been the weapons of a primitive people unacquainted with the use of metals. Buffon also (1778) declared the same. Haddon, p. 138.

²⁰ Cath. Ency. *Ency Americana* (1922). *Geol. Mag.*, new series, Dec., 1883.

fect of the Departments of Basses-Pyrénées and Indre-et-Loire. But, retiring early from office, he gave himself up to study and scientific travel. He was early interested in American antiquities, upon which he was at one time a leading authority, his great work on "Prehistoric America" being published in Paris (in French), in 1883, and in New York (in English), in 1884. Later, he took a leading part in the exploration of the wonderful caves of southern France, and especially in the artistic character of their mural decorations, whose discovery caused such surprise both to the scientific and artistic world of the "eighties." On this subject he was probably the foremost authority until Abbé Breuil's own day. But De Nadaillac's interests were still broader. He was not alone the scientist, but the patriot and the Christian as well, as his works show. He studied deeply the relations of science to faith, and was one of the first to warn the French nation of the impending danger of race suicide. Besides such scientific articles as "Tertiary Man," "The Glacial Epoch," "Prehistoric Peoples," "Most Ancient Traces of Man in America," "Progress of Anthropology," "Lacustrine Populations of Europe," "Prehistoric Caverns," and others appearing in *Le Journal de l'Institut* or *La Revue des Questions Scientifique*, he published such works as the "Decline of the Birthrate in France," "The National Danger," "Science and Faith," "Evolution and Dogma" and "Unity of Human Species." To a dignified presence, Nadaillac united, we are told, exquisite politeness and a kind heart. He was a member of learned societies in almost every part of the world, and held decorations from various governments, besides being a chevalier of the Legion of Honor and a correspondent of the Institute of France. His death occurred in 1904, at his family estate of Rougemont.²¹

Jean Albert Gaudry, distinguished paleontologist, and member of the French Institute, who, we are told, "has won enduring fame wherever vertebrate paleontology is studied,"²² stands out prominently among those Catholic savants who incline to the theory of evolution. But it is an evolution which presupposes a Creator and a teleological plan. In an address to his students, Gaudry says of evolution: "It is the hypothesis I prefer, but whether it be adopted or not, it appears certain there has been a plan"; while in the Introduction to "Les Enchainements du Monde Animal" he writes: "How little soever we may be, it is a pleasure and even a duty, to study nature, because nature is a pure mirror which reflects the Divine

²¹ "L'Anthropologie," vol. xv., No. 5, Paris, Sept., 1904. "Am. Anthropologist," Jan., 1905. "Science and Learning in France," p. 24.

²² The same, p. 127.

Beauty." It is well known that many eminent Catholics, of unimpeachable orthodoxy, have embraced modified theories of evolution, while fully accepting the Scriptural account of man's creation. This applies notably to the two great French naturalists of the eighteenth century, Buffon and Lamarck, whom evolutionists of the present day seem uniting to claim as progenitors of their favorite theory. Both Buffon and Lamarck set themselves in opposition to the "fixity of species," as propounded by Cuvier and Linnæus. Buffon proposed his teachings as to racial variations produced by climate, food, and habits of life, while Lamarck developed a theory of transformation, or transmutation of species, which, under the name of Lamarckianism and neo-Lamarckianism, has become the rival of Darwinianism in explaining the efficient causes of evolution.

It may not, however, be fully realized that these great Catholic scientists were primarily led to formulate their theories in the cause of orthodoxy. Darwinism was not yet, and at the opening of the nineteenth century the views of anthropologists were, as we have seen, in important respects, the reverse of present-day pronouncements. Cuvier's great authority had established belief in the immutability of species to such an extent as to cast doubt upon the Scriptural account of man's descent from a single pair. On this point, anthropologists were divided into two hostile camps. The monogenists, who upheld the Scripture record, and the polygenists, who claimed a plural origin for man. "The writings of the encyclopedists, the freedom of thought claimed by Voltaire and Rousseau," states Haddon,²⁴ "together with the classification of species by Linnæus, emboldened the polygenists." Their position was strengthened by the scientific results of Napoleon's Egyptian expedition. The polygenists showed in triumph the bodies of mummied animals, thousands of years old, yet adhering strictly to present type, and pointed to the thick lips and distinctly Negro features of African slaves depicted on the pyramids, arguing with much force that the type which had remained unchanged in every respect since the days of the Pharaohs could hardly have been evolved from the same race as the Caucasians in the short time then allotted for man's existence since the deluge. But, *tempora mutantur*. The introduction of Darwinian views reversed many anthropological verdicts. Yet the traditions of polygenism lingered later in France than we may realize, since it was not until 1895 that Topinard (a disciple of Broca) published his "Elements of Anthropology" to clear the

²³ Zahm: "The Church and Science."

²⁴ Cath. Ency. Evolution. See also "Evolution Restreinte aux Espèces Organiques." Père Leroy, O. P. Haddon: "Anthropology," p. 60, p. 68.

scientific atmosphere of the remaining mists of polygenism and monogenism and diffuse the light of the new ideas of Darwin and Haeckel.²⁵ Truly, *La Scienza, come la donna, è mobile!* and had the Church been obliged to conform to her varying dicta, during the centuries of what President White has been pleased to call "the conflict of science with theology," she must have changed her tenets many times.

But to return to more recent achievements. At the early age of twenty-five, Jean Albert Gaudry joined in the organization of a scientific expedition formed to explore the archeological treasures of Cyprus and Greece. From 1855 to 1860 he resided in the latter country. At Pikermi, he "investigated the deposit of fossil vertebrata and uncovered notable mammalian fauna of the miocene period." In 1853, he had already been appointed assistant to D'Orbigny in the chair of paleontology of the Paris Museum of Natural History. He became full professor in 1872, and, ten years later, was elected member of the Academy of Science. In 1900 he was chosen to preside over the International Congress of Geology held in Paris in that year. His works are much esteemed by geologists, especially in his "Enchainements du Monde Animal dans les Temps Géologiques;" "Animaux fossiles et Géologie de l'Attique;" "Paléontologie Philosophique;" and others on fossil mammalia. His death, in November, 1908, was felt as a loss to paleontology.²⁶

We have now to speak of the work of Edouard Piette, the intimate friend and, until his death in 1906, the fellow laborer of Abbé Breuil, over whose researches he exercised the inspiring and directive influence of an older specialist. M. Piette is preëminently distinguished for his archeological work in the Pyrenées, his investigation of its "painted pebbles" and sculpture and his establishment of the genuineness of its paleolithic cave paintings and etchings²⁷ and, above all, for his excavations in the cave at Mas d'Azil, of which Haddon speaks as constituting a "landmark" in such studies.²⁸ The Mas d'Azil is a little town at the foot of the Pyrenées, about forty miles southwest of Toulouse, on the road from St. Girons to Carcassonne, where the River Arize winds for some distance through a tunnel, laid open by the hand of nature, for the spade and trowel of the paleontologist. The tunnel, with the caves and "galleries" opening

²⁶ Haddon: "Anthropology," p. 41. Both Buffon and Lamarck (see "Lamarck," "Cath. Ency.") expressed their firm belief in the Scriptural account of man's creation. Buffon's profession of belief was solemnly made before the Sorbonne, and there seems no reason to cast a doubt on his sincerity, as is done by Clodd, in his "Pioneers of Evolution," p. 101. Also Haddon, p. 25.

²⁷ Geological Magazine, 1903, p. 49.

²⁸ "Learning and Science in France," p. 23.

²⁹ Haddon, p. 150.

upon it, had long been known to abound in accumulations of the paleolithic, or Old Stone Age, but it remained for M. Piette to dislodge a series of strata, known as "transition beds," forming successive links between the Paleolithic, or Old Stone Age, and the Neolithic, or New Stone Age. As an "hiatus," or considerable interval of time, is supposed by many geologists to separate these two eras (the men of the older age having been swept away by post-glacial floods before the coming of the new race), while other geologists deny that any such "hiatus" exists, testimony bearing upon a "transition" period becomes of peculiar interest.³⁰

We have now reached the era of Abbé Breuil's activity, the disciple and successor of Edouard Piette. Henri Breuil was born in 1877 at Mortain in the Manche, of a family of some little prestige in Picardy. His early studies were made under Catholic auspices, at the Collège libre of St. Vincent, at Senlis. At eighteen, he entered the Seminary of St. Sulpice, at Paris. Here, as we have seen, he came under the guidance of Abbé Guilbert. His marked taste for the natural sciences soon showed itself. He had early taken up the study of entomology, which was to prove itself of service to him later, but only as subsidiary to the great pursuit of his later choice, archeological research. The young Abbé found early opportunity of associating himself with the noted archeologists then working at Paris, Capitan d'Ault du Mesnil, Boule, Gaudry; but above all, with Edouard Piette. These associations greatly strengthened his already well-developed attractions, which, as we have seen, were to deepen in regard to Piette into a devoted friendship and discipleship.

Abbé Breuil's scientific life began with certain publications in 1898, on the chronological status of the Bronze Age. After 1901, much of his time was spent with M. Capitan in cave exploration in the Dordogne. Later, he was called upon by Cartailhac to join him in similar work in the French and Spanish Pyrenées. In the celebrated cavern of Attamira, in 1902, and in those of the Cantabrian Mountains, discovered by Alcalde del Rio. "Of the many important works dealing with special caves,"³¹ writes Geikie, "mention may be made of the splendid monograph by E. Cartailhac and H. Breuil of La Caverne d'Attamira; the admirably executed figures and plates of which exhibit the artistic attainments of Magdalenian man in mural drawing and painting." Professor Osborn gives us a detailed chronological list of Abbé Breuil's publications, while his work on

³⁰ Geikie: "Antiquity of Man," pp. 294-297; also 269 and 314-316.

³¹ "Antiquity of Man," p. 309.

the men of the Old Stone Age is replete with illustrations of the latter's pictorial work.

In 1909 Abbé Breuil was invited by the Prince of Monaco to accept a post in the Institute de Paleontologie Humaine, founded by that liberal patron of the sciences, since which time most of the Abbé's work has been published under the patronage, and at the expense, of the Prince. "At the International Congress held at Monaco in 1906, and at Geneva, in 1912, to discuss the whole subject of the Cave Man," Dr. Walsh tells us that Abbé Breuil was considered, by all present, "by far the best informed man on the whole circle of departments of knowledge which have gathered round the subject of this earliest ancestor of man in Europe."³² The personal character of the Abbé may be judged from the sense of charm experienced by all who have been brought into personal touch with him, as several of our American scholars, as well as many eminent Europeans testify. They speak of his patient fidelity in work and of his cheerful readiness to impart knowledge, and also of his conscientious performance of priestly duties. Every morning he says Mass; distributing Holy Communion where possible, before donning his khaki for the day's work. At night, he resumes his cassock and recites his office.

The sciences of archeology, anthropology and geology so overlap one another, that the exponent of one of these sciences is often proficient in the others. We turn, however, now to consider a few of those Catholic savants who may more strictly be regarded simply as geologists. Among the earliest of French geologists, was the truly Catholic scholar, Jean-Baptiste-Armand-Louis-Léonce-Elie de Beaumont, who was born near Caën, in Calvados, France, in 1798. His studies were pursued at the Collège Henri IV, and, later, at the School of Mines, Paris. His professor of geology, Brochant de Villiers, chose him as his assistant and paid to him, and his fellow student, Dufrénoy the compliment of inviting them to accompany him on a geological tour through the English mining country, a tour whose experiences they utilized later, in their joint publication of a "*Voyage métallurgique en Angleterre.*"

In 1825, the two young geologists began the preparation of a geological map of France; a master work, requiring eighteen years for its completion, and whose publication established a geological era in France. Successive honors were now showered upon de Beaumont, who continued to direct the geological survey of France until his death. In 1827 he was chosen professor of geology at the Ecole des Mines. In 1832 he was appointed to the same chair at the

³² Osborne, pp. 515-16.

³³ J. J. Walsh: "Cath. Churchmen in Science," Series 3, p. 163.

Collège de France. In 1833 he became chief engineer of mines, finally succeeding de Villiers as general inspector. In 1835 he was admitted to the Academy of Sciences and in 1853, succeeded Arago as its perpetual secretary. His fame extended throughout Europe, resting chiefly on his extensive field surveys and epoch-making work on the age and origin of mountain systems. Elie de Beaumont was, above all, a man of ardent faith and great integrity of character, which manifested itself in all the relations of his life, and his death, in 1874, was felt, not only in the scientific world, but by all who knew and personally honored the man.³⁴

Elie de Beaumont's mantle, geologically speaking, may be said to have fallen upon the distinguished French scientist, Gabriel Auguste Daubrée, who, like, de Beaumont, united earnest faith and Christian character with scientific attainment. Born at Metz in 1841, he early entered governmental service and was sent on foreign missions to England, Sweden and Norway, but became finally attached to the department of the Lower Rhine. He was a close observer of geological conditions and profited by every opportunity for geologic and mineralogical study. His writings on these subjects soon at- of brilliant experiments in synthetic geology, which "have made his name famous in the annals of that science." Both at Strasbourg and later at Paris, he made extensive researches as to the artificial production of minerals." Experiments to reproduce rock structure, in the laboratory, have had their origin and development very largely in France," we are told, "the leading part (if we except the most recent work by refined methods) having been taken by Daubrée." "Several minerals have been produced in the presence of water, or water vapor, heated in a sealed tube, by Daubrée, Sarasin, and Friedel."³⁵ "Daubréelite," a grayish mineral found in meteoric iron, takes its name from Daubrée.

But the study of mineralogy did not exhaust his activities: he made various experiments to ascertain the action of super-heated, aqueous vapors in the pressure and strain of geological formations. In 1861, he was admitted to the Academy of Sciences, and succeeded Cordier as Professor of Geology in the National Museum at Paris. From 1862, he lectured at the Ecole des Mines, of which he became director in 1872. His career was a long and prominent one, his personal charm of manner and nobility of character "winning him many friends and admirers," among whom must be reckoned Don

³⁴ Cath. Ency., vol. 5, p. 385. Ency. Brit., Eliade Beaumont. "Science and Learning in France," pp. 98, 100, 116.

³⁵ "Science and Learning in France," p. 116, p. 123.

Pedro, the late Emperor of Brazil.³⁶ Daubr  es death occurred in 1896.

We now pause to consider the work of Charles Sainte Claire Deville, brother of the famous chemist, Henry Etienne Sainte Claire Deville, whom we recall also as the close friend of Pasteur. Although preceding Daubr  e somewhat in point of time, Deville's special investigations may be considered as supplementing those of Elie de Beaumont and of Daubr  e, which bore on the formation of mountain ranges. Born at St. Thomas, in the West Indies, Charles and his brother came early to Paris to study. Charles entered the Ecole des Mines and after graduation, returned to the Antilles, where he made a series of explorations on seismic and volcanic phenomena, which early became his absorbing study. Returning in 1855, three years later, he visited Vesuvius and Stromboli. His theory of volcanic eruption arresting the attention of the learned world, he was made, in 1857, a member of the Academy of Sciences. Later, he became the assistant of Elie de Beaumont at the Coll  ge de France, succeeding him in 1875. A few years previously he had been appointed Inspector General of the French Meteorological Service, a position which gave him the great opportunity needed for the establishment of his seismic theory. Deville inaugurated a series of meteorological stations through France and Algiers, and became first President of the Observatory of Mountsouris, one of the chain. Death found him, at the age of sixty-two, in the midst of his work. He like Dr. Branly, to show the strength and sincerity of his religious passed away in 1876, leaving to others the further pursuit of investigations which have proved so fruitful in their special department.³⁷

We have now reached the era of the activities of Albert de Lapparent, possibly the most distinguished of recent French geologists, who, despite his acknowledged superiority in his chosen science, was obliged to undergo the petty persecution of anti-clericals and convictions by his willingness to suffer on their behalf. Father Gerard, the English Jesuit, in his sketch of De Lapparent,³⁸ quotes a tribute from the scientific journal "Nature," rendered to De Lapparent at his death in 1908: "The loss sustained, not only by geology, but by science at large, by the death of so accomplished a write, cannot at once be fully appreciated. By his death the cause of science has been deprived of one of its most strenuous and successful advocates. He was an eminently religious man, and sacrificed not a little in life for the sake of his convictions. No temptation could

³⁶ Cath. Ency.

³⁷ Cath. Ency.

³⁸ "Twelve Catholic Men of Science" (ed. Sir B. Windle, p. 213).

induce him to abandon the *Institute Catholique*, where from the foundation, he continued to be one of the pillars."

The sun of popularity, however, had early smiled upon the brilliant young student before the advent of these crucial tests, since De Lapparent possessed, in a high degree, those traits of character which disarm antagonism and win regard. Born at Bruges, in 1839, of staunch Catholic parents, he followed the profession of his father, who was an officer of the engineers. At eighteen, young De Lapparent gained admission to the *Ecole Polytechnique* as first of his competitors, closing with the same honorable record. At the *Ecole des Mines* he became attached to the staff of Elie de Beaumont, and a close friendship of enthusiastic admiration on the one side, and warm confidence on the other, sprang up between pupil and teacher. An early "Memoir" of great promise by De Lapparent led to his selection as one of the staff chosen to prepare the "*Annales des Mines*," a yearly summary of scientific results; a work which enabled him to attain a wide knowledge of scientific progress, both at home and abroad. We next find him employed in a series of investigations concerning the practicability of a proposed tunnel under the English Channel—an Herculean labor and immense responsibility to be entrusted to so young man. Over 8000 soundings were taken by De Lapparent in the years '75 and '76, the Cross of the Legion of Honour being finally bestowed upon him in recognition of the value of his services. This task was followed by a geological survey of the district of Bray in Normandy and Picardy, and his memoir on which at once took high rank as "a model of its kind." Hitherto De Lapparent's work had been that of a practical geologist, but towards the close of the year 1875, the chair of geology and mineralogy was offered him, in the then newly organized Catholic University of Paris, and at once accepted by him, he being allowed at same time to continue his connection with the *Ecole des Mines*.

In the anti-clerical crisis which followed, however, this permission was withdrawn, and Le Lapparent was "curtly informed" that he must choose between his "official position as state engineer" and that of professor at the "*Institute Catholique*." Promptly and unhesitatingly, De Lapparent chose the humbler position, taking a step which he was told might "wreck his whole scientific career." Results, however, proved that he had chosen wisely. De Lapparent was now in a congenial atmosphere, and at liberty to devote himself, moreover, to the special forms of geological research to which he felt drawn. In 1880, the very year in which his downfall had been

predicted, he was elected President of the "Geological Society of France." De Lapparent's early work, his share in preparing the map of France, his coöperation with Delesse in the "*Revue de Géologie*," had won for him great practical experience combined with a wealth of scientific data of which he was now to make use, for beyond his mere scientific talents, De Lapparent possessed preëminently the pen of a ready writer with the gift of great simplicity and clearness in exposition. His "*Traité de Géologie*," published in Paris, in 1884, won immediate success and rapidly passed through five editions. Both as to matter and style, the new work was felt to come from the hands of a master. "In the space of 1200 pages, the author contrived to distil the substance of countless memoirs in all languages, with a fulness and clearness which left nothing to desire, so that each of his chapters became an encyclopedia of geological knowledge in every branch."³⁹

It is true that the time was opportune for De Lapparent's work, since the manuals of geology current in France, in his day, were notably dull, antiquated, and deficient. But to those who sought to minimize the praise due to the author, by this plea, the answer was simple, since the hour had been as opportune for them as for him, yet to De Lapparent alone it was left to remedy the defect, and produce a work which at once took rank as a classic. The "*Traité*" was followed, in 1885, by his "*Cours de Minéralogie*," which won him the presidency of the French "*Société de Minéralogie*" and a prize from the "*Académie des Sciences*." Shortly after this, De Lapparent began a series of conferences at the Catholic University on physical geography. The merit and charm of these conferences was so great that the lecturer was invited to accept the chairmanship of the Central Committee of the Society of Geography and was sent, in 1896, to represent that Society at its International Congress held in London. In 1897 he was elected a member of the Academy of Sciences and, on the death of Berthelot, in 1907, he was appointed to succeed him as secretary of that body. Not the least among Albert De Lapparent's merits was his tireless industry. His pen, his voice, in countless lesser memoirs and lectures, as well as in his greater works, were ever at the service of religion and science. So hard did he work that he himself marvelled he "had not worn out sooner." To him, as Father Gerard adds, might most aptly be applied the words, uttered by himself of L. de Bussy, in 1904, that

³⁹ Gerard: "Albert de Lapparent" in "*Twelve Men of Science*," p. 216. Cath. Ency.

"the lives of some men furnish sermons more eloquent than those of the best preachers."⁴⁰ His own death occurred in 1908.

Continuing our record of Catholic scholarships in the line of the natural sciences, we hasten to consider some noted French naturalists, both botanists and zoölogists. Among the first, we meet at the opening of the nineteenth century with the celebrated family of the Jussieu's. Of the five great botanists belonging to this family, only the last two fall within the limits of our discussion. But the entire family, like that of the Becquerel's, appear as a unit in their union, of scientific knowledge and faith, with the added personal characteristics of modesty and genius.⁴¹ What an anonymous biographer said of the second Jussieu, might well be extended to include the entire family. "No one has proved better than (they) how religious feeling can be combined with many sciences and much knowledge." The three elder Jussieu's were brothers and their fame as botanists is well known. They also practiced medicine and were particularly kindly and generous in their ministrations to the poor. Of the two younger members of the family, Antoine Laurent, born at Lyons in 1748, dying at Paris in 1836, was nephew to the three brothers. Adrien Henri de Jussieu, born at Paris in 1797, and dying there in 1853, was his son. They thus represent the progress of their science throughout the first half of the nineteenth century and were jointly the founders of what is now known as the "Natural System" of plants (now universally adopted), in contradistinction to the "artificial system" of Linnæus.

Antoine Laurent Jussieu, trained by his uncle, Bernard, naturally succeeded to the family heritage of scientific prestige, and was early placed in charge of the "Jardin du Roi," and soon after made professor of botany in the medical faculty of Paris, where he lectured until 1826. His earlier studies had, as with the elder members of the family, included medicine. He was already a member of the Academy of Sciences, and therefore in a position to speak with authority of all that concerned Natural Science. This he did in his great treatise entitled: "De Genera Plantarum," in which he developed the ideas of the elder Jussieu's into a comprehensive system and placed them on a demonstrable basis. His work gave great impetus to the efforts of English and German botanists and finally superseded the now obsolete system of Linnæus. At the era of the French Revolution, Jussieu, with other French scientists, had reorganized the Natural History Museum at Paris. In 1808 he was appointed "Counsellor" of the "University of France," into which

⁴⁰ See also "Les Etudes." July 20th, 1908.

⁴¹ Cath. Ency. "Jussieu." Ency. Brit. Larousse : Diet.

Napoleon had merged all the separate national universities. From this time until his death he was engaged in increasingly active investigations of plant life and the publication of their results in the "Annales" and "Memoirs" of the Museum.

He resigned his professional chair, however, in 1826, in favor of his son, Adrien Henri Jussieu, whose life was devoted to the completion of his father's labors. In 1824 Adrien had received the degree of doctor of medicine at Paris. In 1826 he succeeded his father as professor of agricultural botany, and in 1845 was made professor of the organography of plants at the University. Some time before his death he became president of the Academy of Sciences. His *Dictionnaire Universelle de l'Histoire Naturelle* has been translated into almost all the modern languages. The botanical system of the Jussieu's, however, had its own burning question to meet, for we must remember that the theory of variations began with plant life, although the storm centre has now moved farther on. The discussion of these questions was carried on chiefly by Linnæus and Cuvier, on the one hand, and Buffon and Lamarck (aided by Geoffroy de S. Hilaire) on the other.

Lamarck's life work continued on into the nineteenth century by such a narrow margin, he would hardly fall within the scope of this article were it not that his theories of transmutation have obtained such wide circulation at the present day. Jean-Baptiste-Pierre-Antoine de Monet, Chevalier de Lamarck, was born at Bazentin, Picardy, in 1744. By his father, he was destined for the Church, and committed to the care of the Jesuits. His youthful ambition, however, to fight under his country's banner led him to betake himself, at seventeen, to the seat of war. There, in the midst of a battle, he gallantly took the place of a brother who had fallen at the head of his command. Mounting his brother's horse, young Lamarck led the battalion forward. Though decorated for bravery, a serious accident put an end to his military career, and he became instead the famous botanist and zoölogist we know him to have been. While Antoine Laurent Jussieu was writing his *'Genera Plantarum,'* Lamarck was composing his *"Flore Francaise,"* the first complete account of the flora of France; and while the former was reorganizing the Museum of Natural History the latter was considering the acceptance of the chair of zoölogy offered him then. Lamarck was now forty-nine and his mental activity was at its height. He had already secured his election to the Academy of Sciences, and completed his famous botanical tour through Europe, with the son of Buffon.

It is to the work of the next twenty-five years that he owes his chief fame. It might have continued longer, but in 1818 he was

smitten with blindness and obliged to surrender his lectureship to his friend, the Abbé Latreille. He lived until 1829, but in suffering and straitened circumstances, solaced only by the devotion of his family, especially of his eldest daughter whom Cuvier relates never to have left the house during his father's illness, and by the visits of his faithful friend, Latreille. "Lamarck,"⁴² we are told, "can with more right than Darwin be called the originator of the theory of evolution." To these theories we have already alluded; it only remains for us to add that Lamarck was a conscientious Catholic, adhering to the tenets of his faith, and submitting his views to the authority of Scripture should they conflict. His name is perpetuated in botany by those of many genera of plants called after him. His greatest zoölogical work was the "*Histoire Naturelle des Animaux sans Vétébres*," in which he was aided in his blindness by the Abbé Latreille. In 1909 a monument to Lamarck was unveiled at the Museum of Natural History in Paris.

Lamarck's friend and fellow zoölogist survived him by but a few years, dying in 1833. As a poor boy left destitute by his parents in 1788, he was cared for by the kindness of the Abbé Haüy, the celebrated mineralogist. The boy studied for the priesthood and was ordained in 1786. He then took up the study of entomology, retiring to Brives, near his own birthplace, for quiet and leisure. From this retreat he was driven by the rude soldiery of the French Revolution and sent in a cart to Bordeaux on sentence of transportation. The fortunate discovering of a rare beetle, "*Necrobia Rufficollis*," obtained for him the intercession of the naturalist, Bory St. Vincent, but several hairbreadth escapes had still to be passed through. In 1799 he was placed in charge of the entomological department of the Museum of Natural History and elected a member of the Academy in 1814. Of his joint work with Lamarck we have spoken. Not until the latter's death in 1829 would he take official possession of his chair. His lesser memoirs and articles are too numerous for separate mention. Among his greater works are his "*Précis des Caractères génériques des Insectes*;" "*Genera Crustaceorum et Insectorum*;" "*Histoire Naturelle, générale et particulière des Crustacés et Insectes*;" "*Considerations sur l'Ordre Naturel des Animaux*;" "*Familles naturelles du Règne animal*;" and "*Cours d'Entomologie*." Latrielle not only added largely to the known number of insectivora, but rendered incomparable service to science by his

⁴² Cath. Ency.: "Lamarck"—"Evolution" (by E. Wasman). "Eloge de Lamarck." Cuvier, 1835.

classification of them. By some, he is considered as the founder of entomology.⁴³

Great service has been rendered to science in another branch of natural history by the work of the two brothers, Louis René and Charles Tulasne, perhaps the most eminent of modern authorities on vegetable fungi, who have collaborated largely with the avowed desire of glorifying God by their scientific work. Louis, a year the senior, studied law at Poitiers, but later turned his attention to botany and worked until 1842 with Auguste de Saint Hilaire, on the flora of Brazil. From 1842 to 1872 he was assistant naturalist at the Museum of Natural History, Paris. In 1845 he was elected to succeed Adrien Jussieu as member of the Academy of Science. Later, retiring from active work, he devoted himself to special research on microscopic and parasitic fungi, a work in which he was largely aided by his brother, Charles, whose earlier medical studies had prepared him to supplement his brother's labors in this field. The brothers lived in retirement in their country home, devoting all their leisure to science, or to labors of love among the needy and unfortunate. On the death of Louis, Dr. Vidal wrote to the President of the French Academy: "You will have at Paris full information regarding the scientific work done by M. Tulasne, but what will never be known is the amount of good he did to those about him."⁴⁴ The two brothers died within a few months of each other, Charles in August and Louis René in December, 1885. Their larger works include, "*Fungi Hypogæ*" and "*Selecta Fungorum Carpologia*," they wrote, in addition, numerous mycological treatises for various scientific institutes and journals. The brothers bequeathed their library to the Catholic Institute of Paris.

Of the Catholic faith of Jean Theodore Lacordaire, brother of the famous Dominican, we hardly need farther assurance than this relationship. His scientific life is full of romantic incident. Hampered as a boy in his scientific aspirations by the stern necessity of earning a livelihood, he later managed to escape from the trammels of mercantile pursuit and roamed on foot through the wilds of Brazil, discovering, if not "*Rivers of Doubt*," at least much valuable insect fauna. His career as an entomologist thus begun, was developed by four successive journeys to South America and one to Senegambia, the intervening years being spent in Paris in the arrangement and publication of his specimens. Lacordaire seems to have been a very knight-errant of science, entering into the adventure and physical

⁴³ Ency. Cath. Ency. Brit.

⁴⁴ Brennan: "What Catholics Have Done for Science," p. 166. Cath. Ency. "Tulasne."

effort attending his quests with an energy and zest that would have delighted the heart of a Theodore Roosevelt. Yet his light-heartedness and his spirits in no way interfered with his true spirituality which became even more conspicuous in his declining years, which were spent at the University of Liège. His scientific life brought him into contact with the foremost zoölogists of his time, and he was honored by membership in numerous learned European societies. The titles of his numerous entomological works are almost too technical for detailed mention, with the exception of his last great work on which he labored for eighteen years, "*L'Histoire Naturelle des Insectes*," which contains an account of 6000 genera of beetles, in fourteen volumes. Despite the ardent desire of the naturalist's heart to complete this history, he was obliged to leave its termination in the hands of his pupil,⁴⁵ F. Chapuis.

We must now add the name of a missionary priest to our list of Catholic naturalists. Armand David was born at Espellette in the Basses Pyrenées in 1826. Although early attracted to science, religious fervor prevailed and he entered the Congregation of the Missions (Lazarists) in 1848, and was ordained priest in 1862. During the intervening years he had been allowed to devote himself to the study of the natural sciences and to teach the same at Savone, but after ordination he was dispatched on a mission to Peking, China. Here he began the collection of material for a Museum of Natural History, comprising both flora and fauna. At the request of the French government some specimens from his collection were sent to Paris, where they excited the utmost interest among naturalists. He received an immediate commission to undertake a scientific journey in the interests of the Jardin des Plantes. In this, and later journeys, Abbé David succeeded in obtaining an immense number of plants and animals of hitherto unknown species, some so curious and interesting as to create a sensation in the scientific world. In 1866 he made a new departure and traveled through Mongolia and Eastern Thibet, the latter, at that time, a wholly forbidden land which it required no slight courage to enter. In 1872 he made a third journey through China, lasting two years. What Father David's scientific journeys meant to botany and zoölogy can hardly be estimated. His own account of them is given in his "*Journal of Travel in Central China and Eastern Thibet*," "*A Journal of My Third Tour of Exploration in the Chinese Empire*," "*Birds of China*," and "*Plantæ Davidianæ*."⁴⁶ More remarkable, perhaps, than even his scientific achievements, is the fact of which we are assured that

⁴⁵ Cath. Ency.

⁴⁶ Cath. Ency. Ency. Americana. Larousse.

amid all his exhaustive labors, Father David was in no wise forgetful of his religious rule. His death occurred in 1900, in the midst of his labors. David was corresponding member of the French Institute.

We must now draw our present record of Catholic scholarships in France to a close with a brief account of Jean Henri Fabre, the wonderful "Moussu Fabré," so dear to the heart of Provençal France, whose jubilee as the greatest of living French entomologists was celebrated at Serignan, in the April of 1910. Jean Henri Fabre was indeed a great entomologist, but "with a difference"—for while such scientists generally delight to dissect the insect's organs, analyze its functions, and classify their minute victims as to genus and species, Fabre cared for none of these things. His interests are concentrated in the active, living insect, its labors, its habits, its joys and sorrows, its likes and dislikes, and the means it possesses of evincing them. He longs to enter into the "secrets of these little lives." He watches the tasks they set themselves with infinite patience and wonders as to the thoughts and emotions which pass through their tiny minds." Such were the joys of the "sturdy old man" who passed almost the whole of his long life of ninety years (he died in 1915) in the company of wasps and bees, gnats and beetles, spiders and ants—"lesser creatures of the Good God," dear to the large-hearted naturalist as endued by their Creator with marvellous instincts, which their incomparable biographer has recorded in ten most charming volumes of "*Souvenirs Entomologiques*." One can scarcely read this fascinating work, or the biography of its author, by the Abbé Fabre, without a feeling of attraction toward the kindly personality which each so vividly depicts. We see the urchin of the Provençal farm at Malaval, the young student at St. Leons and Rodez; the professor at Ajaccio and Avignon, and, finally, the hermit at Serignan, living happily among his insect family and, in his domestic life, surrounded by those who were his most loving and willing collaborators. Darwin pronounced Fabre an "incomparable observer." Victor Hugo describes him as the "Insect's Homer," while Edmond Perrier, director of the Museum of Natural History, salutes him as "one of the Princes of Natural History." In regard to the first encomium, we may say that, while Fabre always spoke respectfully of the talents of the great evolutionist, he distinctly disagreed with his views, basing his opposition largely on the highly developed instincts of even the lowest members of the insect world. "The eternal question," he writes, "if one does not rise above the doctrine of dust to dust, is, how did the insect acquire so discerning an art?" And again, speaking of the dung-beetle, known as the

"pill maker": "Either we must grant the flattened cranium of the dung-beetle the distinguished honor of having solved for itself the geometrical problem of the alimentary pill, or we must refer it to a harmony that governs all things beneath the eye of an Intelligence which, knowing all things, has provided for all."

To his acknowledged observational and scientific abilities, Fabre added a winning charm of narration, which alone would have won him a high place among litterateurs, and which seems largely the outcome of great simplicity of character and keen spiritual perception. These traits evince themselves in his religious life, sometimes almost startlingly. When questioned, shortly before his death as to his belief in God, he answered: "I do not say merely that I *believe* in God: I *see* Him: without Him, all is darkness. Every period has its manias; I regard atheism as a mania. It is the malady of the age. You could take my *skin* from me more easily than my faith in God."⁴⁷

E. VON RYCKEN WILSON.

(To be continued)

⁴⁷ (Unlike Gaudry, also a "good Catholic," Fabre was strongly anti-Darwinian. Note, p. 8.) "Life of Jean Henri Fabre," by Abbé Augustin Fabre.

THE FIRST MASS

I AM well aware that the Last Supper is commonly regarded as the First Mass. It is the purpose of this paper to show that the first Mass was not celebrated till after the resurrection and ascension of Our Lord into Heaven.

The question is not one of words nor of appearances only. There is question of the reality underlying the words and the appearances. As far as words go, there is identity, though the expression, "Mystery of Faith," which is found today in the form of consecration, is believed to have been added by the Church. As far as that which appears to the senses is concerned, Our Lord was seen to offer Himself visibly in the Supper, while it is someone else who is seen to offer Him in the Mass. And yet, to the eye of faith, as St. Ambrose points out, "Christ Himself is plainly seen to offer in us, since it is His word which sanctifies the Sacrifice that is offered."¹

I say there is question of the reality underlying appearances. The Supper was fundamentally different from the Mass. An indication of this difference is to be found in the fact that the Sacrifice of the Supper was offered once and could never again be offered, while the Sacrifice of the Mass is offered over and over again "in every place, from the rising of the sun to its going down." As it is appointed unto men once to die, "so Christ died once, and being risen from the dead dieth now no more: death hath no more dominion over Him." Our Lord in the Supper was mortal and passible; in the Mass, He is immortal and impassible. And so by a gulf as deep as death and hell, the death He underwent on Calvary and the hell He descended into after death, is the Supper divided and differentiated from the Mass.

St. Thomas says of the Body of Christ that "inasmuch as it was mortal and passible, it was apt matter for immolation."² It was this in the Supper. In the Mass it is immortal and impassible, and therefore not apt matter for immolation. And because it was apt matter for immolation in the Supper, it was there offered to be immolated, *i. e.*, to undergo the Passion and the Death on the Cross. The nature of the immolation is shown by what the matter was apt for. Being passible and mortal the Victim was to suffer and to die. Till He did suffer and die, the immolation was not accomplished, the sacrifice

¹ Comm. on Ps. 38, n. 25.

² 3a q. 48, a. 3, ad Ium

was not finished. It follows that the Supper was but a sacrifice begun, not a completed one. In the Mass, on the other hand, there is offered a finished sacrifice. So, the Supper and the Mass differ as that which is only begun differs from that which is completed. Hence the Last Supper could not have been the First Mass.

Under symbols of wheaten bread and the juice of grape, Our Lord offered Himself in the Supper. In the Mass He is offered as the Bread baked by the fires of the Passion in the ashes of our sin and of His mortality, as the Wine made new in the Kingdom of God by the Beautiful One in His stole Who came with dyed garments from Bosra, treading the winepress alone. As, then, the beginning differs from the end that crowns it, and the materials from the finished product, so does the Supper differ from the Mass.

"The Passion of the Lord," says St. Cyprian, "is the Sacrifice that we offer."³ Upon this also St. Thomas rings the changes. "The Eucharist," he says, "is the perfect Sacrament of the Lord's Passion, containing as it does Christ who suffered."⁴ And again: "It is manifest that the Passion of Christ was a true Sacrifice."⁵ And once more: "Though the Passion and death of Christ is not to be repeated, the virtue of that Sacrifice, once offered, endures forever."⁶ "We do not offer other than that which Christ offered for us, His Blood, namely. Hence ours is not another sacrifice, but is the commemoration of that sacrifice which Christ offered, as we read in Luke xxii, 19: This do for a commemoration of Me."⁷

We offer in the Mass what Christ offered in the Supper, when He said, "Do this for a memorial of Me." He offered all that which led up to and ended in His Death upon the Cross. He offered not His Death only, but His Passion, and every item of His Passion, every pang of the mental and bodily torment which He was about to endure. Even in the Supper the mental anguish began. There weighed upon His soul the treason of Judas, which He made public, as did the denial of Peter. This was part of the price He had to pay for our betrayals and our backslidings—part of the Sacrifice of our Ransom which He offered there. Now, as there was but a beginning of the Passion in the Supper, and as the virtue of the whole Passion and Death is in the Mass, it follows that the Last Supper was not the First Mass.

This follows also from the fact that the Mass is a Commemorative Sacrifice. When Our Lord said: This is My Body, this is My

³ Ep. 63, n. 17.

⁴ 3a. q. 73, a.

⁵ ad. 2um. 5, Ib. q. 48, a. 3.

⁶ Ib. q. 22, a. 5, ad. 2um.

⁷ Comm. on Ep. to the Hebrews, c. 10, v. I.

Blood, He offered the Sacrifice of our Ransom which was consummated upon the Cross—a bloody sacrifice, for without the actual shedding of blood there was to be no remission of sin. When He said: “This do for a commemoration of Me,” He instituted the Commemorative Sacrifice which we call the Mass. He instituted it, I say, He did not offer it; just as He instituted baptism but did not Himself baptize. What is the Mass commemorative of? The Passion and Death of Christ. Did Christ in the Last Supper commemorate His own Passion and Death? Of course not. We keep the memory of what is done and over. The offering in the Supper was but an earnest and foretokening of what is commemorated in the Mass. Therefore the Last Supper was not the First Mass.

The current conception of the Last Supper is that of a Sacrifice other than the Sacrifice of Calvary, and complete in itself. If this were the true conception, the Mass would be the continuation of that Sacrifice, and the Last Supper would have been the First Mass. But the traditional teaching of the Church from the beginning makes the Mass to be the continuation of the Sacrifice of Calvary. St. Augustine says that the Sacrifice of our Ransom was offered up for the soul of his mother, Monica. The inference is plain and necessary that the Sacrifice offered in the Supper was completed on Calvary, since the Mass is the continuation of the complete Sacrifice.

The same is to be inferred from the teaching of St. Paul in the Epistle to the Hebrews. He there sets Christ before us as “priest forever according to the order of Melchisedech,” and declares that “by one Sacrifice He hath perfected forever them that are sanctified.” This was the Sacrifice of Calvary. Hence, according to the Apostle, Christ offered the Sacrifice of Calvary as Priest according to the order of Melchisedech, which He did in the Supper according to the rite of Melchisedech, and only in the Supper. And so Calvary intervenes between the Supper and the Mass, the Supper being the inauguration, Calvary the consummation, the Mass the unbloody continuation and commemoration of the One Sacrifice which redeemed the world.

The Sacrifice of Calvary is operative in the Mass. For the Mass fulfils perfectly the fourfold end of sacrifice: (1) public worship of God; (2) propitiation for our sins; (3) thanksgiving for the sovereign favour of our redemption; (4) impetration of fresh favours. Now a thing must be before it is operative, and the Sacrifice of Calvary was not till Christ died on the Cross. It follows that the Supper could not be the first Mass, for the Supper

came before Calvary and the Sacrifice of Calvary itself did not become operative until it was finished.

The view that the Sacrifice of Calvary stands by itself, apart and distinct from the Supper and the Mass, is untenable for two reasons. The first is that the Sacrifice is made to consist in the Death only, whereas, it consists also in the Passion. The second is that by the positive ordinance of God, Sacrifice comprises a liturgical offering as well as an immolation of the victim, and there was no liturgical offering on Calvary. Indeed, there was no offering there, for to offer is not actually to give or hand over, but to tender or present for acceptance, and this presentation had to be made before the giving actually began, since the Passion of the Lord, as says St. Cyprian, is the Sacrifice that we offer, and every pang that our Saviour suffered from Thursday evening when He reclined at table with the twelve till the afternoon of Friday when He gave up His spirit on Calvary was part of what is known as the Passion.

The Sacrifice of the New Law was prefigured by the sacrifices of the Old Testament, and especially by the great sacrifice of expiation which was offered once a year for the sins of the whole people, and was to be "an ordinance forever." (Levit. xvi.) It is no poetic conceit that the Coming Event cast its shadow before; it is a truth of divine revelation. The rite, therefore, of the New Testament Sacrifice, which alone "blotted out the handwriting of the decree that was against us," "is outlined for us in the Old Testament offering for sin. On the feast of expiation the high-priest first made the ceremonial offering of the victim at the door of the tabernacle of the testimony, then shed its blood, and, last of all, went with the blood into the holy of holies to hand it over there to the Lord. Immediately afterwards he came into the holy place, and on the altar that was there made the offering of the blood, smearing with it the horns of the altar Ib. V. 18. So our High Priest first made the ceremonial offering of His Sacrifice according to the rite of Melchisedech, then shed His Blood to the last drop on the Cross, and after His resurrection went up to the holy of holies in the heavenly places to make there the solemn offering of His Sacrifice, "having obtained eternal redemption." Immediately afterwards the apostles are gathered together in the cenacle, and, as St. Ambrose says in the already cited words, the same High Priest is "plainly seen to offer" in them, for it is of divine faith that He is the Priest of the Sacrifice. There, then, in the cenacle, where the Eucharistic Sacrifice was instituted, the First Mass was offered up, even as it is offered up today, "in memory of the passion, resurrection, and ascension of

Jesus Christ Our Lord.”⁸ Fittingly were these stupendous events commemorated by the apostles in the First Commemorative Passover of the New Testament, for He who suffered, and rose from the dead, and ascended into Heaven, had withdrawn from them His visible presence; and He had bidden them: “Do this for a commemoration of Me.”

ALEX. MACDONALD.
Bishop of Victoria.

⁸ Ordinary of the Mass.

IN NATURE'S REALM

THE SONG SPARROW (*Melospiza Melodia*)

FAMILY AND RELATIVES

THE Song Sparrow belongs to the Finch Family of birds, which is one of the largest groups of song-birds, including as it does the finches, sparrows, buntings, grosbeaks, crossbills and linnets.

Sparrow comes from an Anglo-Saxon word, *spearwa*, and is affiliated with the old Gothic *sparwa*, "the flutterer, or quiverer." The scientific name of the Song Sparrow is formed from the Greek *melos* melody, and *spiza*, the name of some finch mentioned by Aristotle. The genus *Melospiza* contains both the Song and the Swamp Sparrows, of which the Song Sparrow, specifically termed *melodia*, is considered rather the sweeter singer of the two.

There are several varieties of *Melospiza melodia* found in the western and northern parts of America, such as the Gray Song Sparrow, Oregon, Rusty, Kadiak, Hoermann's, Samuel's and Lincoln's.

Melospiza melodia was formerly called *Fringilla melodia*, which will explain the title of Henry Pickering's poem, "To the Fringilla Melodia." Silver-Tongue is one name for the bird.

RANGE AND HABITAT

This plainly colored, but brilliant musician may be found abundantly nearly everywhere, but there is never one too many. He spends his winters in the Middle and Southern States, and the breeding range includes Northern United States and Southern Canada.

The Song Sparrow is a friendly little fellow, and inhabits the gardens, orchards, shrubbery, bushes and roadside thickets, and low, bushy meadows and swamps. He likes to live near water. He will be more frequently found in low trees and bushes, or on the lower branches of larger trees, for he seems to prefer to be near the ground. He may be seen feeding on the ground and gliding through thickets in search of food; being a nimble runner, he is not timid and goes wherever he chooses.

MIGRATION

The neighborly little Song Sparrow is one of the first birds to arrive in the spring and one of the last to leave in the autumn. A few remain in the north all the year. As they can eat seeds, it is not

necessary for them to migrate with the freezing of insect life, and their journeys are comparatively short when undertaken at all. These birds closely follow the Robin and the Bluebird, with whom they are often seen.

APPEARANCE

The Song Sparrow would never take the beauty prize in a bird show, for he is an extremely plain bird. He has no bright colors and has not even a single mass of plain plumage, but, like many of our best singers, what he lacks in appearance he makes up in musical talent. He is reddish brown above, with dark brown streaks and grayish edgings; below, he is white streaked with brownish; his crown is a dull-bay, striped with black and gray; his tail is plain brown, often marked with wavy bands across the feathers. In worn, midsummer plumage, the streaking is very sharp, narrow and black, from wear of the feathers; in fresher feather, the markings are softer and more blended. Usually the spots on the sides of the breast unite at the center front into a blotch, giving the bird the appearance of being clad in a soiled vest ornamented with many buttons. Both birds look about the same. In size they average six and a half inches in length by eight and a half in wing spread. The body is small, but stout; the bill a conical, finch-beak, especially adapted to seed-eating; the wings are short and much rounded, the tail long and nearly even, and the feet are strong, the outside toe being the longest. He hops but does not walk. The flight is slow and rather heavy, but undulating and never very high nor continued very far. He always flies downward, pumping his tail as he flies, or he goes straight along into the bushes. One of his specialties is to dive head first into a bush.

FOOD

Since this bird inhabits the ground mainly, that is naturally where he seeks his food, generally among bushes or weeds. He has a peculiar mouse-like way of running along through the grass when looking for insect food, as though trailing his victims. Being chiefly seed-eaters, they are able to spend the winters comparatively far north, and do not always find it necessary to migrate. In summer they eat insects of all kinds, worms and larvæ and dandelion seeds. They are not fastidious, and adapt themselves readily to all conditions of climate and food.

VALUE OR USE TO MAN

One can easily judge of this bird's value after noting the kind of food he eats. He is a most useful bird, economically, for his vegetable food consists wholly of weed-seeds.

He is not a timid bird, and can always be found near the suburbs.

He will even venture into city parks, and generously treat noise-weary ears to a bit of fresh country music. Cats are the birds' greatest enemies, and for this reason no vagrants should be allowed at large in any park communities.

NEST AND EGGS

The Song Sparrow's nest varies as to location and materials. Often it is placed on the ground, in a pleasant, breezy, dry meadow; but his fancy is just as likely to choose a boggy swamp for the nursery. It may be built in a tree, or bush, or a grass tuft, or in a hole in a tree or stump, or even in a tin can. One bird built in a clump of golden rod before it bloomed. He shows the same haphazard choice of materials; he may make a bulky structure of weeds, leaves, coarse grass, and line it carefully with hair, or he may make a flimsy affair entirely of grass, even to the lining.

Two or three broods may be reared in one season, the pair frequently making a new nest for each brood. Both sexes sit on the eggs, taking turns.

The eggs vary as to color and size. The usual number is four to six; they may be greenish or grayish-white, endlessly varied with browns, from reddish to chocolate as surface markings, and lavender or purplish shell markings, either speckled, blotched, or clouded. Sometimes the egg is nearly plain, sometimes it is so thickly freckled as to cover nearly all the ground color. The size may be .75 x .55 inches, or .85 x .60.

SONGS AND CALLS

As a musician of exceptional ability, this little bird ranks near the head of his family. He sings from morning till night, all the year 'round, and in all kinds of weather. He has been known to sing as many as six songs, all different, and all executed while he perched on a fence in plain sight. One never tires of Song Sparrow music, for there is always something distinctive about the bird's songs. He has his own methods, and follows them as he pleases, and that he is a true artist is shown by the way he handles his motives. He usually repeats a note or a trill several times and then, as if tired of it, he begins another. Often the trill comes at the end of the song, or sometimes even in the middle of it, or it may be omitted, according to the mood of the singer. One never knows what to expect, and that is what makes him so interesting. Mr. Torrey says, "He will repeat one melody perhaps a dozen times, then change it for a second and in turn leave it for a third as if he were singing hymns of twelve or fifteen stanzas each and set each hymn to its appropriate time."

In early spring his song is louder than in late summer, and in

autumn it resembles a soliloquy more than a melody. Dr. Coué calls him "a hearty, sunny songster, whose quivering pipe is often tuned to the most dreary scenes; the limpid notes being one of the few snatches of bird melody that enliven winter."

Sometimes he signs on the wing, but he invariably chooses a conspicuous place, as though he did not wish to muffle his exquisite voice, when he deliberately settles himself for a song service. One day I saw a little fellow singing from the top of a pile of boards near a city street. He was answered by a companion who was perched in a small tree not far away. They seemed to be carrying on a conversation set to music, for each one sang a different melody.

"The bluebird and song sparrow sing immediately on their arrival, and hence deserve to enjoy some pre-eminence. They give expression to the joy which the season inspires, but the robin and blackbird only *peep* and *chuck* at first, commonly, and the lark is silent and flitting. The bluebird at once fills the air with his sweet warblings, and the song sparrow from the top of a rail pours forth his most joyous strain. Both express their delight at the weather, which permits them to return to their favorite haunts. They are the more welcome to man for it."—Henry David Thoreau.

"The Song Sparrow is more sprightly, mingling its notes with the rustling of the brush along the water sides, but it is at the same time more terrain than the bluebird. The first woodpecker comes screaming into the empty house, and throws open doors and windows wide, calling out each of them to let the neighbors know of its return. But heard farther off it is very suggestive of ineffable associations, which cannot be distinctly recalled, of long-drawn summer hours, and thus it also has the effect of music. I was not aware that the capacity to hear the woodpecker had slumbered within me so long. When the blackbird gets to a *conqueree* he seems to be dreaming of the sprays that are to be and on which he will perch. The robin does not come singing, but utters a somewhat anxious or inquisitive *peep* at first. The Song Sparrow is immediately most at home of those I have named. The wind blows strong, making the copses creak and roar, but the sharp tinkle of a Song Sparrow is heard through it all."—Henry David Thoreau.

"The Song Sparrow modulates its simple ditty as softly as the lining of its own nest. . . . Can anything be more exquisite than a sparrow's nest under a grassy or mossy bank? What care the bird has taken not to disturb one straw or spear or grass, or thread of moss! You cannot approach it and put your hand into it without violating the place more or less, and yet the little architect has wrought day after day and left no marks. There has been an ex-

cavation, and yet no grain of earth appears to have been moved. If the nest had slowly and silently grown like the grass and the moss, it could not have been more nicely adjusted to its place and surroundings. There is absolutely nothing to tell the eye it is there. Generally a few spears of dry grass fall down from the surf above and form a slight screen before it. How commonly and coarsely it begins, blending with the débris that lies about, and how it refines and comes into form as it approaches the center, which is modeled so perfectly and lined so softly! Then, when the full complement of eggs is laid, and nidification has fairly begun, what a sweet, pleasing little mystery the silent old bank holds: The Song Sparrow, whose nest I have been describing, displays a more marked individuality in its song than any bird with which I am acquainted. Birds of the same species generally all sing alike, but I have observed numerous Song Sparrows with songs peculiarly their own. Last season, the whole summer through, one sang about my grounds like this: '*Swee-e-t, wee-e-t, swee-e-t, bitter.*' Day after day, from May to September, I heard this strain, which I thought a simple, but very profound summing-up of life, and wondered how the little bird had learned it so quickly. The present season I heard another with a song equally original, but not so easily worded. Among a large troop of them in April, my attention was attracted to one that was a master songster—some Shelley or Tennyson among his kind. The strain was remarkably prolonged, intricate, and animated, and far surpassed anything I ever before heard from that source."—John Burroughs.

"The song-sparrow's song is for simple faith and trust."

—John Burroughs.

When the birds roost on the ground, they often commence singing before they are out of their beds, much like the skylark.

Thoreau, in his year-books of his life at Walden Pond, mentions the Song Sparrow often. He notes that the country girls in Massachusetts hear the bird saying: "*Maids, maids, maids; bring on your teakettle, teakettle-etle-etle!*" He says the birds have two kinds of variations on their strain hard to imitate—*ozit, ozit, ozit, psa te te te tete ter tve ter*, being one, and the other beginning with *chip, chip che we*. He calls the notes of the Song Sparrow "more honest-sounding than most" bird notes; and compares the bird with the robin: "The *chip* of the Song Sparrow resembles that of the robin, that is, its expression is the same, only fainter, and reminds me that the robin's *peep*, which sounds like a note of distress,

is also a chip or call-note to its kind." He also speaks of "its well-known dry *tchip-tchip*."

CHARACTERISTICS

This gentle, winning little songster is beloved by all for his happy disposition, his continuous music, and his striking originality. He is always neighborly, self-confident, and not troubled with bashfulness, though he is rather shy except during the mating season. He is so common as to be almost domestic.

Song sparrows are very neat birds, and good housekeepers. They bathe often and seem fond of it; the nest and the young are kept very clean.

While one bird is hovering the eggs, the mate will feed it carefully, and if a female is killed the male often raises the family. They are good parents, faithfully guarding their numerous babies and keeping up a constant chatter to them and to each other while doing so.

ANECDOTES

"Sitting near an open window one day last summer, as was my habit, my attention was attracted by the singing of a song sparrow perched upon a twig not far away. Fancying that he addressed himself to me individually. I responded with an occasional whistle. He listened with evident interest, his head on one side and his eye rolled up. For many days in succession he came at about the same hour in the afternoon, and perching in the same place, sang his cheery and varied songs, listening in turn to my whistle."—Cherney.

Often the course of true love does not run smooth in the sparrow's courtship, for a rival is very apt to appear. On one such occasion, the rivals clutched in the air and clawed at each other for a time. But suddenly both fell to the ground with a thud, and were so jarred, or surprised, that they forgot the cause of their trouble and flew away without further ado.

(January 15, 1857)—"As I passed the south shed at the depot I observed what I thought at first a tree sparrow on the wood in the shed, a mere roof open at the sides, under which several men were at that time employed sawing wood with a horse-power. Looking closer, I saw, to my surprise, that it must be a song sparrow, it having the usual marks on its breast, and no bright chestnut crown. The snow is nine or ten inches deep, and it appeared to have taken refuge in this shed, where there was so much bare ground exposed by removing the wood. When I advanced, instead of flying away, it concealed itself in the wood, just as it often dodges behind a wall. Is it peculiar to song sparrows to dodge behind and hide in walls and the like?"—Henry David Thoreau.

(February 2, 1858)—“As I return from the post office I hear the hoarse, robin-like chirp of a song sparrow, and see him perched on the topmost twig of a heap of brush, looking forlorn, and drabbled, and solitary in the rain.”—Henry David Thoreau.

(January 28, 1857)—“Am again surprised to see a song sparrow sitting for hours on our wood pile in the midst of snow in the yard. It is unwilling to move. People go to the pump, and the cat and dog walk around the wood pile without starting it. I examine it at my leisure through a glass. Remarkable that this coldest of all winters this bird should remain. Perhaps it is no more comfortable this season farther south, where they are accustomed to abide. In the afternoon this sparrow joined a flock of tree sparrows on the bare ground west of the house. It was amusing to see the tree sparrows wash themselves, standing in the puddles and tossing the water over themselves. They have had no opportunity to wash for a month perhaps, there having been no thaw. The song sparrow did not go off with them.”—Henry David Thoreau.

A bird-lover describes a concert of song sparrows he attended: “In the swamp, the song sparrows are holding an opera gleefully. One little fellow hopping about in the grass crips sharply, and then bursts into a loud, rollicking, tempestuous melody that almost makes me turn a somersault for very joy; and now, having sung his intermittent trills for a few minutes, he begins to warble a sweet, continuous lay with an andante movement. Another little songster runs over several trills, rising higher and higher until he strikes a high note that is bewitchingly sweet; this he holds for a moment, then drops to a lower note, after which he repeats the process, the high note seeming to be the climax of his song.”

“One day a tragedy was enacted a few yards from where I was sitting with a book; two song sparrows were trying to defend their nest against a black snake. The curious, interrogating note of a chicken first caused me to look up from my reading. There were the sparrows, with wings raised in a way peculiarly expressive of horror and dismay, rushing about a low clump of grass and bushes. Then, looking more closely, I saw the glistening form of the black snake, and the quick movement of his head as he tried to seize the birds. The sparrows darted about and through the grass and weeds, trying to beat the snake off. Their tails and wings were spread, and, panting with the heat and the desperate struggle, they presented a most singular spectacle. They uttered no cry, not a sound escaped them; they were plainly speechless with horror and dismay. Not once did they drop their wings, and the peculiar expression of those uplifted palms, as it were, I shall never forget.

It occurred to me that perhaps here was a case of attempted bird-charming on the part of the snake, so I looked on from behind the fence. The birds charged the snake and harassed him from every side, but were evidently under no spell save that of courage in defending their nest. Every moment or two I could see the head and neck of the serpent make a sweep at the birds, when the one struck at would fall back and the other renew the assault from the rear. There appeared to be little danger that the snake could strike and hold one of the birds, though I trembled for them; they were so bold and approached so near to the snake's head. Time and again he sprang at them, but without success. How the poor things panted, and held up their wings appealingly! Then the snake glided off to the near fence, barely escaping the stone which I hurled at him. I found the nest rifled and deranged; whether it had contained eggs or young I know not. The male sparrow had cheered me many a day with his song, and I blamed myself for not having rushed at once to the rescue when the arch enemy was upon him. There is probably little truth in the popular notion that snakes charm birds. The black snake is the most subtle, alert and devilish of our snakes, and I have never seen him have any but young, helpless birds in his mouth."—John Burroughs.

PLACE IN LITERATURE

The sparrow has had a place in literature ever since the translation of the Bible into English; it is one of the birds of Shakespeare, and is often mentioned by other poets. The "Hedge-Sparrow" of Shakespeare and other English poets is not a member of the finch family at all; it is a warbler, and its more proper name is Hedge Accentor.

Many of the references to the sparrow found in poems obviously pertain to the English, or House Sparrow; the kinds mentioned by name in American poetry are Golden-Crowned, White Crowned, White Throated, Song, Field, Chipping and Vesper Sparrows.

Doubtless many of the references to sparrows are applicable to the song sparrow, though the whole name of the bird is not given, particularly the following quotations from Emerson, Lowell and Bryant:

QUOTATIONS

- "Already, close by our summer dwelling,
The Easter sparrow repeats her song;
A merry warbler, she chides the blossoms—
The idle blossoms that sleep so long."
—William C. Bryant ("An Invitation to the Country")
"A week ago the sparrow was divine."
—James R. Lowell ("Under the Willows")

"I thought the sparrow's note from heaven,
Singing at dawn on the alder bough;
I brought him home in his nest at even—
He sings the song, but it pleases not now."

—Ralph W. Emerson ("Each and All")

"In April, when the robin roused all the sleepers at dawn, the sparrow was among the first to respond, and while yet the sun was below the horizon, assured all the plain Quakers within hearing that he was a good Pres-pres-pres-pres-pres-by-terian."

—C. C. Abottt, M. D.

"No omen of spring is more anticipated by the naturalist than the clear call of the song sparrow, and few contrasts are stronger in Nature than when, amid the silence of a breathless snowstorm in March, this hilarious and irrelevant creature interrupts the frozen benediction of expiring winter."—H. E. Parkhurst.

"From a stone wall or bush close by, he will hear, undoubtedly, the strong, vivacious strain of the song sparrow, which, more than any other bird, seems to feel the responsibility as well as the joy of announcing spring's arrival."—H. E. Parkhurst.

"Joy fills the vale,
With joy ecstatic quivers every wing;
As floats thy note upon the genial gale,
Sweet bird of spring!"

—Henry Pickering ("To the Fringilla Melodia")

"And the sweet song sparrow cries, 'Spring! It is Spring!'"

—Celia Thaxter ("The Wild Geese")

"And with thy joy again will I rejoice;
God never meant to mock us with that voice!"

—Celia Thaxter ("The Song-Sparrow")

"Now see if you can tell, my dear,
What bird it is that, every year,
Sings 'Sweet-sweet-sweet—very merry cheer!'"

—Henry Van Dyke ("The Song-Sparrow")

"While the song-sparrow, warbling from her perch,
Tells you that spring is near."

—William C. Bryant ("Among the Trees")

"When the air is glad with wings,
And the blithe song-sparrow sings."

—John G. Whittier ("Among the Hills")

"and on its banks
The gray song-sparrow sings."

—John G. Whittier ("Birchbrook Mill")

"Bird of the door-side, warbling clear,
In the sprouting or fading year!
Well art thou named from thy own sweet lay,
Piped from paling or naked spray,
As the smile of the sun breaks through
Chill gray clouds that curtain the blue."

—William Cullen Bryant ("The Song-Sparrow")

"The rathe song-sparrow, yesternoon that shook
The elder with his lay, these dells forsook,
Leaving no echo of his voice or wing."

—Lloyd Mifflin ("The Fields of Dawn")

"Oh, the birds cannot tell what it is that they sing!
But to me must the song-sparrow's melody bring,
Whenever I hear it,
The joy of a spirit
Released into life on that dim dawn of spring."

—Lucy Larcom ("The Song-Sparrow")

"I heard the blithe song-sparrows who welcomed the bright day."

—Celia Thaxter ("The Secret")

"For still
The February sunshine steeps your boughs
And tints the buds and swells the leaves within;
While the song-sparrow, warbling from her perch,
Tells you that spring is near."

—William Cullen Bryant ("Among the Trees")

"Where water flows, where green grass grows,
Song-sparrows gently sing, 'Good cheer*'"

—Henry Van Dyke ("An Angler's Wish")

"Climmers gray the leafless thicket
Close beside my garden gate,
Where, so light, from post to picket
Hops the sparrow, blithe, sedate;
Who, with meekly folded wing,
Comes to sun himself and sing."

—George Parsons Lathrop ("The Song-Sparrow")

"Walden is melting apace. A great field of ice has cracked off from the main body. I hear a song-sparrow singing, from the bushes on the shore,—*olít, olít, olít,—chip, chip, chip, che char,—che wíss, wíss, wíss.* He, too, is helping to crack it."—Henry David Thoreau.

"The first song-sparrows are very inconspicuous and shy on the brown earth. You hear some weeds rustle, or think you see a mouse run in the stubble, and then the sparrow flies low away."—Henry David Thoreau.

MEADOW-LARK (*Sturnella Magna*)

FAMILY AND RELATIVES

SOME bird-lover, writing of the meadow-lark, says that "he is no longer a lark; he has been shuffled all around the scientific catalog of birds, and he may yet be discovered to be no bird at all, but a myth of the meadow."

The term *lark*, as applied to the meadow starlings of America, is obviously objectionable, because incorrect and misleading, but it is apparently ineradicable through the claim of precedent and the force of habit. He is always called "meadow-lark" by people and poets, and will probably always be so-called. Other terms for the bird are field-lark and old field-lark. His correct name, however, is meadow-starling. He does not belong either to the family of the Old World Skylark, or to that of Old World Starling, but to the family of American Orioles, which includes the American blackbirds, the bobolink and the cowbird. All these birds are strictly American, the family not being represented in any other country.

The meadow-lark's name, *sturnella magna*, is two Latin words, the first meaning a *starling* and the *magna* meaning *large*.

RANGE AND HABITAT

Eastern and Central North America is the home of this attractive little bird, and the breeding range is from the Gulf of Mexico to Minnesota and New Brunswick. The winters are spent in the Southern States. Mr. Maynard says that when he visited, in 1871, the famous Indian hunting grounds of Florida, which lie south of the Everglades, there were countless meadow-larks there and that they were very tame.

In the Western United States, from Iowa to the Pacific, is found the western meadow-lark, a bird with paler and duller colors, but with a finer song than the eastern bird. Neither is he so timid, often coming into towns and singing from the roofs of houses.

As the name implies, the bird is distinctly a meadow character, and strictly a ground dweller. He always walks about while looking for food, but when singing may perch on a post, wire fence, tree, or stone.

MIGRATION

These birds are imperfectly migratory, going just far enough south to escape old winter's clutches. The flights are performed by day, and flocks usually travel together, flying above the tree tops. Audu-

bon observes that "at such times its motions are continued, and it merely sails at intervals to enable it to breathe and renew its exertions. When they alight to feed, an old male, now and then, glances around in search of danger; should any be perceived he warns the flock by a loud rolling note, at which the party make haste to depart from that locality."

(March 12)—"I see and hear the lark sitting with head erect, neck outstretched, in the middle of a pasture, and I hear another far off, singing. They sing when they first come. All these birds do their warbling in the still, sunny hour after sunrise. Now is the time to be abroad to hear them, as you detect the slightest ripple in smooth water."

(March 15)—"The note of the lark leaks up through the meadows, as if its bill had been thawed by the warm sun."

(March 26)—"The lark sings perched on the top of an apple tree, *seel-yah seel-yah*, add then, perhaps, *seel-yah-see-e*, and several other strains quite sweet and plaintive, contrasting with the cheerless season and bleak meadow. Farther off I hear one with notes like *ah-tick-seel-yah*."

(April 6)—"The lark is equally constant morning and evening, but confined to certain localities, as is the blackbird to some extent."

(December 23)—"Larks were about our house in the middle of the month."

(December 26)—"I heard the larks sing strong and sweet."

—Henry David Thoreau.

APPEARANCE

The meadow-starling furnishes one of the finest examples of protective coloring. The brown spotted, or mottled, plumage on the back harmonized perfectly with the meadow grass, while the color of the breast is copied from the buttercups, daisies, and other prairie flowers. There is a yellow stripe over the eye and one on the crown, and the male wears a crescent-shaped necklace of rich, jet black over his bright yellow vest front. For this reason, crescent-stare is one of his local names.

A white meadow-lark has occasionally been seen, but, like the white blackbird, is a freak and not a special species.

He is a little larger than the American robin, measuring about eleven inches in length and seventeen in wing-extent. The body is thick and stout. The bill is nearly straight and longer than the head. The feet are especially fitted for living on the ground, being very large and stout, and when stretched to their fullest extent

reach to the end of the tail. Like other birds that frequent the ground, he has extremely long claws on the hind toes. He is a good, active walker. The tail is very short, with narrow-pointed feathers like those of the bobolink and other meadow residents; the outer feathers, being marked with white, are very conspicuous in flight. (Burrough) (18). The wings are short and much rounded. The bird flies in an oblique direction, and the flight, though graceful, is labored and seems to be hard work. The wings are too short and the body too heavy for rapid or long-continued traveling, so he flies as little as possible. He resembles the bobolink in the laborious and awkward way in which it rises from the ground, Shelley's description in his "Ode to a Skylark," "Thou dost float and run," exactly fits the meadow-starling, for when flying he sets sail and uses his wings alternately. When alighting, he selects the main or topmost branches of trees, or reed-tips, for perches.

The young are quite large babies and are covered at first with a brownish-gray down. The beaks are pinkish, and the inside of the mouth is a deep rose instead of yellow. The eyes are closed with a membrane for several days after hatching.

(June 9)—"As I go along the railroad causeway, I see, in the cultivated ground, a lark flashing his white tail, and showing his handsome yellow breast with its black crescent, like an Indian locket."—Thoreau.

"It has the build, and walk, and flight of the quail and the grouse. It gets up before you in much the same manner, and falls an easy prey to the crackshot. Its yellow breast, surmounted by a black crescent, it need not be ashamed to turn to the morning sun, while its coat of mottled grey is in perfect keeping with the stubble amid which it walks."—Burroughs.

FOOD

Feeding on the ground, this bird lives almost entirely on the insects that are found in meadow and pasture grass. Grasshoppers form a large part of their food. They also eat many thousand-legs, cutworms, army worms, beetles—June beetles, ground, blister, click, plant and May beetles—chinch bugs, crane flies, locusts and the hairy larvæ of the tiger moth.

VALUE

"The farmer cannot afford to dispense with the services of the meadow-lark, for it busies itself all summer eating grasshoppers and noxious insects, and when autumn comes varies its diet with rag-weed and other weeds, until in December these noxious plants comprise 25 per cent. of its food."—Dr. S. D. Judd.

Professor Boal, after examining the stomachs of 238 birds, says: "No sprouting grain of any kind was found in the stomachs in summer; the largest quantity was eaten in January when food was scarce."

In South Carolina and Georgia, they swarm among the rice plantations, running about the yards accompanied by killdeers. Sold in Pennsylvania markets, their flesh is valued as little inferior to that of the quail in amount and delicacy, though one wonders how even an epicure can eat such a bright and cheerful songster.

NEST AND EGGS

The nest, which is made entirely of grass, is built on the ground in open meadows, where there is tall grass, or in grain fields. It is placed in a tuft of grass or grain, and so is very difficult to find, especially when the mother broods on it, for then her colors blend so perfectly with the grass around her that she is almost invisible. Frequently the nest has a covered arch or passage several feet long, leading away from it, but the birds usually rely upon their protective colors for concealment. Their worst enemies are field mice, snakes and mowing machines.

The first brood is able to run about by the time the hay is ready to cut, but then the first nest has been disturbed and the birds are obliged to make a new one, the little nestlings are often still in the shell when the mowers come into the field. The second family is apt to meet a tragic end unless the parent birds give warning of their danger and the farmer is a kind-hearted man. Many mowers cut around the nest and so do not hurt either the brooding mother or her babies.

The eggs number four, sometimes five or even six, and are white, speckled with reddish-brown and lilac, chiefly near the larger end. The size is 1.10 by .80 inches.

After the nesting season, young and old collect in flocks, but they do not usually fly in parties as do blackbirds.

SONGS AND CALLS

The clear, ringing, flute-like whistle of the meadow-starling is one of the pleasures of spring-time, and on hearing it, one is instantly reminded of grassy meadows and hay fields. Burroughs says, "It smacks of the soul and is the winged embodiment of our spring meadows." Again, he speaks of the "long, tender note of the meadow-lark comes up from the meadow"; of "the long, rich note of the meadow-lark," and of "the pedestrian meadow-lark sounding his piercing and long-drawn note in the spring meadows."

"The bird among us that is usually called a lark, namely, the

meadow-lark, which our later classifiers say is no lark at all, has nearly the same quality of voice as the English skylark—loud, piercing, z-zing; and during the mating season it frequently indulges while on the wing in a brief song that is quite lark-like. It is also a bird of the stubble, and one of the last to retreat on the approach of winter.”—Burroughs.

“A prominent April bird that one does not have to go to the woods or away from his own door to see and hear is the hardy and ever-welcome meadow-lark. What a twang there is about this bird, and what vigor! It smacks of the soil. It is the winged embodiment of the spirit of our spring meadows. What emphasis in its ‘z-d-t, z-d-t,’ and what character in its long, piercing note. Its straight, tapering, sharp beak is typical of its voice. Its note goes like a shaft from a cross-bow; it is a little too sharp and piercing when near at hand, but heard in the proper perspective, it is eminently melodious and pleasing. It is one of the major notes of the fields at this season. In fact, it easily dominates all others. ‘*Spring o’ the year! Spring o’ the year!*’ it says, with a long-drawn breath, a little plaintive, but not complaining, or melancholy. At times it indulges in something much more intricate and lark-like while hovering on the wing in mid-air, but a song is beyond the compass of its instrument and the attempt usually ends in a breakdown. A clear, sweet, strong, high-keyed note, uttered from some knoll, or rock, or stake in the fence, is its proper vocal performance.”—John Burroughs.

Thoreau records, under date of June 14—“Full moon last night. As I proceed along the back road I hear the lark still singing in the meadow.”

As a songster he is inferior to the song-sparrow and the wood-thrush, but what is more delightfully sweet, after the long winter, than his tender, rather plaintive warble delivered from the fence-post down in the pasture? The song must be heard to be appreciated, for no words can describe the liquid quality of his melody. He sings by curves and slurs which are ornamented with grace notes, and the blending of one tone into another gives the song its characteristic quality. He has several songs, but all are composed after the same pattern, though none are exactly alike. Sometimes he seems to say, “*Spring o’ the ye-ar!*” and at other times he shouts, “*I-I-I-I see your pet-ti-coat!*” in the sauciest way imaginable.

Western birds seem to have songs that are particularly original. This, Dr. Coues thinks, may be due to the different acoustic properties of the dry, rarefied air.

Mrs. Miller pays this beautiful tribute to the charming meadow-

singer: "It is the most intoxicating, the most soul-stirring of bird voices in a land where thrushes are absent; it embodies the solitude, the vastness, the mystery of the mesa. He sings his strain several times and then drops to a very low twittering warble, in which now and then is interpolated a note or two of the usual score, yet the whole altogether different in spirit and execution. He ends by a burst into the loud carol he offers to the world."

These two strains are recorded of the bird:

Besides his songs, he has a call—a strange, harsh chatter uttered sometimes as he flies over.

CHARACTERISTICS

The meadow-lark is a shy bird, more often heard than seen, which may be due to his being hunted for food in some parts of the country. Usually one bird in a party serves as sentinel, and his duty is to perch on a tree or fence post and instantly give the alarm should a gunner approach.

After the nestlings are hatched, the father does not sing very much, but from his favorite observation perch he keeps watch for enemies, and should one approach his whistle rings out with a note of warning. The families usually keep together in the same field where the old birds have a watchful eye on the children, and if danger is near they will try to attract attention from the young ones. Major Bendire believed that meadow-larks remain mated through life. They are generally seen in pairs. Both birds assist in the nest building. The babies stay in the nest for about twelve days. Their first attempts at song are said to resemble a small boy's first whistle.

"Though this well-known species cannot boast of the powers of song which distinguish that 'harbinger of day,' the skylark or Europe, yet in richness of plumage, as well as in sweetness of voice (as far as his few notes extend) he stands eminently its superior. He differs from the greater part of his tribe in wanting the long, straight hind claw, which is probably the reason why he has been classed by some late naturalists with the starlings. But in the particular form of his bill, in his manner, plumage, mode and place of building his nest, Nature has clearly pointed out his proper family."—Wilson.

ANECDOTES

"Meadow-larks often pass the winter as far north as Pennsylvania. A man residing in that State relates how, in the height of the severest cold, three half-famished larks came to his door in quest of food. He removed the snow from a small space, and spread

the poor birds a lunch of various grains and seeds. They ate heartily and returned again the next day, and the next, each time bringing one or more drooping and half-starved companions with them, until there was quite a flock of them. Their deportment changed, their forms became erect and glossy, and the feeble mendicants became strong and vivacious. These larks fell in good hands, but I am persuaded that this species suffered more than any other of our birds during that winter. In the spring, they were unusually late in making their appearance—the first one noted by me on the ninth of April—and they were scarce in my locality during the whole season.”—John Burroughs.

“Dr. Samuel Wilson, of Charleston, told me that one of the meadow-larks which he had purchased in the market, with a number of other birds, has been found feeding on the body of a bay-winged bunting, which it had either killed or found dead in the aviary. He said he had watched the bird more than twenty minutes, and plainly saw that it plunged its bill into the flesh of the finch to its eyes, and appeared to open and close it alternately, as if sucking the juices of the flesh.”—Audubon.

PLACE IN LITERATURE

The Meadow-Lark is not as well known in literature as the Bobolink, but he has by no means been neglected. The following story, though originally told of the English Skylark, applies equally well to our own Meadow Starling:

THE FARMER AND THE LARKS

One day in summer, when Mother Lark came home, she found her five children greatly excited. When they saw her they all began talking at once.

“Oh, mother!” cried the oldest and largest. “We must leave the nest at once. While you were gone, the farmer came into the field with his sons and we heard him say, ‘This grain is ready to be cut. I shall ask my neighbors to come tomorrow and help me!’ What shall we do! What shall we do!”

And all the other little Larks cried, “What shall we do! We are so frightened! We are so frightened!”

But Mother Lark said, “There, there children, don’t be alarmed. I know the farmer and I’m sure he will not cut his grain tomorrow.”

So the little birds soon forgot all about their danger, and were happy once more.

The next day, when the mother flew home with food, the babies were twittering with fright. “What is the matter this time, my dears?”

"Oh, mother!" they cried. "The farmer came again, and he says that the neighbors could not come today, but he will ask his cousins to come and cut the grain tomorrow. Oh, we are so frightened! Can't we go away?"

"Don't cry, children," said the good Mother Lark. "The farmer will not cut his grain tomorrow. We can stay a little longer."

And the little Larks stopped crying.

The next day Mother Lark heard her children crying before she reached home. "Oh, mother!" shrieked the littlest Lark, "We surely must go away now. The farmer came again today, and he said his cousins did not come today, so he would have to cut the grain himself tomorrow."

"Yes, my children," said their mother. "We must go at once, for if the farmer is going to do it himself, it will be done tomorrow. Come with me to a nice pasture I found today."

And the next day, when the farmer and his sons came to cut the grain, all they saw was the empty nest on the ground. "I'm glad those little larks were old enough to fly," said the kind-hearted man.

QUOTATIONS

"When the medder-lark is wingin'
Round you and the woods is ringin'
With the beautifullest singin'
That a mortal ever heard."

—James W. Riley

"What cares he how the March winds do blow
O'er the leafless woods and meadows sere?
He oft proclaims that we all may know,
'Tis Spring o' the year! Spring o' the year!"
—Creswell J. Hunt ("The Meadow-Lark")

"One day as I strolled down a green meadow lea,
This bird I happened to note,
And the mischievous creature was laughing at me
As he chuckled and gurgled and swelled out his throat:
'Ho-ho! ha-ha! he shouted in glee,
'Ho-ho! ha-ha! he-he!
I-I-I see-ee your pet-ti-coat!'"
—Harriette W. Porter ("The Meadow-Lark")

"Linnet and meadow-lark, and all the throng
That dwell in nests, and have the gift of song."
—Henry W. Longfellow ("The Birds of Killingworth")

"And listened to the yellow-breasted lark's
Sweet whistle from the grass."
—J. G. Holland ("Katrina")

"Your meadow-larks melodiously
'Sweet-o'-the-year' proclaim."

—Henry Johnstone ("Birds of America")

"The meadow-lark whistles his one refrain."

—J. G. Holland ("Words")

"And from the meadow damp and dark
I hear the piping of the lark."

—Hamlin Garland ("At Dusk")

"The meadow-lark lifts shoulder-high
Above the sward; and quivering
With broken notes of ecstasy
Slants forth on unmoved wing."

—Anon. ("In Vacation")

"What prima donna thrills such liquid strains
As yon brown meadow-lark, that, floating, sings
Above her nest on slow-descending wings,
With plaintive sweetness that the soul enchants?"

—Lloyd Mifflin ("The Fields of Dawn")

"And when once more, by Beaver Dam
The meadow-lark outsang."

—John G. Whittier ("The Witch of Wenham")

"The field-lark with her speckled breast."

—Phobe Cary ("Old Pictures")

"The brave brown lark from the russet sod
Will pipe as clear as a cunning flute,
Though sky and sod are stern as God,
And the wind and plain lie hot and mute—"

—Hamlin Garland ("An Apology")

"And de old crow croak: 'Don't work, no, no!'
But de fiel'-lark say: 'Yaas, yaas.'"

—Sidney Lanier ("Uncle Jim's Revival Hymn")

"What! would you rather see the incessant stir
Of insects in the windrows of the hay,
And hear the locust and the grasshopper
Their melancholy hurdy-gurdies play?
Is this more pleasant to you that the whirl
Of meadow-lark, and her sweet roundelay?"

—Henry W. Longfellow ("The Birds of Killingworth")

"My ear caught the clear, full whistle of the meadow-lark, concealed within the grass of an adjoining field. This cannot truthfully be called a song, but when uttered with all the animation that is crowded into May, it is one of the most encouraging and inspiring calls of Nature."—H. E. Parkhurst.

"The meadow-larks have a *penchant* for open fields, where they are to be found in smaller or larger flocks all day long; but they are inordinately shy, and commonly take to the wing the instant they are approached. Their clearly whistled song of three or four notes, which seems peculiarly suggestive of the freshness and *openness* of spring, often betrays their invisible presence in the grass or grain field."—H. E. Parkhurst.

"The lark on the mossy rail so nigh,
Wary, but pleased if I keep my place—
Who could give a single grace
To his flute-note sweet and high?"

—Edward Rowland Sill ("Field Notes")

"When meadow-larks that on their breast
Carry the dandelions' crest,
Pipe, in the waving grass."

—Lloyd Mifflin ("In the Fields")

"And, at the break of early morn,
The lark's clear note, like bugle-horn."

—Arthur E. Hayne ("The Old Wood-Lot")

"Tis the meadow-lark!
Flinging his morning song against the hills.
Again—again that golden triumph thrills
The quick air of the spring!
The dew gleams yet in cool nooks of the clover,
And still that wild song peals the green hills over—
Thou bird of morning—sing!"

—Faye Marie Hartley ("A Song of Morning")

"The meadow-lark shows flashing quill
As o'er brown fields she takes her flight."

—John Burroughs ("Early April")

"Now pause and mark the meadow-lark
Send forth his call to spring:
'Why, don't you hear? 'Tis spring o' the year!
Like dart from sounding string."

—John Burroughs ("Arbutus Days")

"And the meadow-larks are singing—a thousand, if there's one!"

—Bliss Carman ("Song of the Four Worlds")

"Only the flute-like note of the lark sounds."

—Hamlin Garland ("The Hush of the Plains—July")

"And the field-lark seen upspringing
In his happy flight afar,
Like a tiny winged star."

—Paul H. Hayne ("Will and I")

"The sparrow and the meadow-lark
And all the winged throng,
Shall drench the woodland and the fields
In floods of joyous song."

—Lewis G. Wilson ("The Hylodes")

"A brave little bird that fears not God,
A voice that breaks from the snow-wet clod
With prophecy of the sunny sod,
Thick set with wind-waved golden-rod."

—Hamlin Garland ("The Meadow-Lark")

"The lark was dreaming of his morning song
In yonder meadow deep amongst the wheat."

—Robert C. Rogers ("Midnight on the Beach")

"Note the meadow-lark strutting all day in the meadows."

—John Burroughs

"The meadow-lark occasionally sings on the wing, in the early part of the season; at such times its long-drawn note, or whistle, becomes a rich, amorous warble."—John Burroughs.

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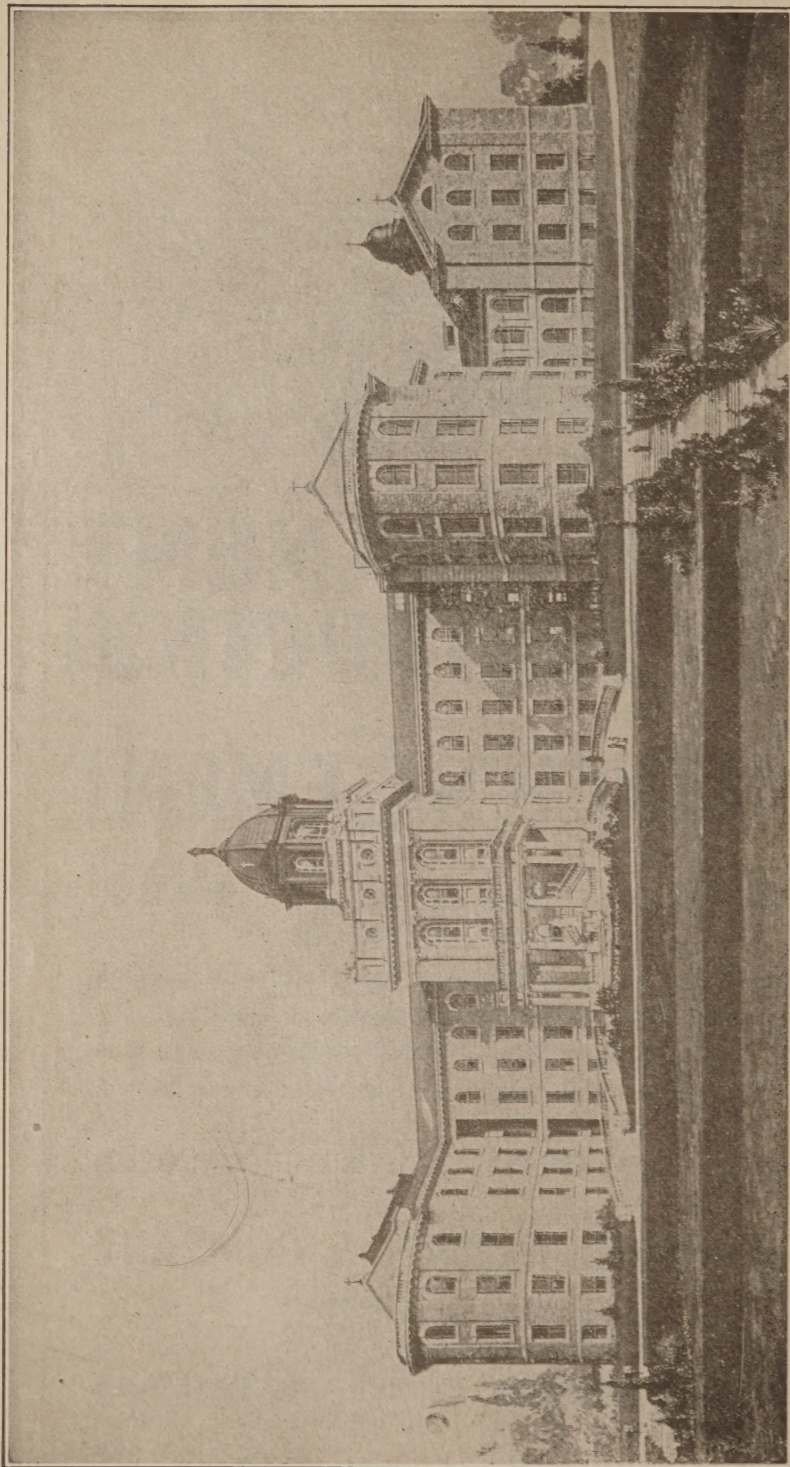
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